

ORDER NO. EMID0103013C0

A4

Service Manual

Digital Piano

SX-PX662

Colours

(K) Black

(M) Walnut

Areas

(P) U.S.A., Mexico

(PC) Canada

**(EX) Norway, Sweden, Denmark, Finland, Spain, Portugal, Greece,
Poland, Czech, South Africa**

(EG) Switzerland, France, Austria, Holland, Belgium, Italy

(EQ) Germany

(EB) the United Kingdom

(GW) Argentina

(GH) Hong Kong, Saudi Arabia, Kuwait

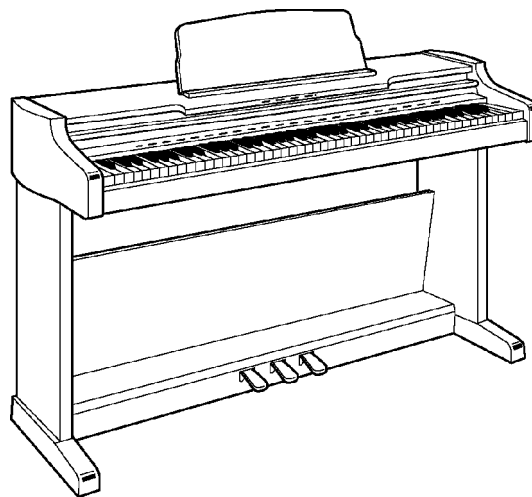
(GT) Taiwan

(GM) Malaysia, Singapore

(GU) Thailand, Panama, Philippines

(GW) Argentina

(GN) Australia, New Zealand



SPECIFICATIONS

SPECIFICATIONS

KEYBOARD	88 KEYS
MAX. POLYPHONY	64 NOTES
SOUND	8 SOUNDS : GRAND, UPRIGHT, E PIANO 1, E PIANO 2, HARPSI, VIBES, STRINGS, PIPE ORGAN
PEDAL	SOFT, SOSTENUTO, SUSTAIN
DIGITAL EFFECT	O
BRILLIANCE	MELLOW, BRIGHT (5 STEPS)
DIGITAL REVERB	O (ROOM, STAGE, HALL, CONCERT)
TOUCH SENSITIVITY	LIGHT, NORMAL, HEAVY
TRANPOSE	G-C-F#
METRONOME	O (TIME SIGNATURE : OFF, 2/4, 3/4, 4/4, 5/4, 6/8)
TUNING	427.3Hz-440.0Hz-453.0Hz
SEQUENCER	TRACK (1,2), STORAGE CAPACITY : APPROX. 4500NOTES, RECORDING MODE : REAL TIME
DISPLAY	O
DEMO	O
MIDI	MULTI TIMBLE, LOCAL CONTROL, OMNI ON, PROGRAM CHANGE, PEDAL, EFFECT, TRANPOSE
MODE SET	PIANO TUNING, MINIMUM RANGE
OTHERS	POWER SWITCH, MAIN VOLUME, MIDI TERMINALS (IN, OUT), PEDAL IN, AUX IN (R/ MONO, L), LINE OUT (R/ MONO, L), HEADPHONESx2, AC IN, INITIAL KEY
OUTPUT	80W (40W×2)
SPEAKERS	14cm×2

POWER REQUIREMENT	100W 110W (NORTH AMERICA AND MEXICO) AC120/ 220/ 230-240V 50/ 60Hz AC120V 60Hz (NORTH AMERICA AND MEXICO) AC230-240V 50/ 60Hz (EUROPE, AUSTRALIA, AND NEW ZEALAND)
DIMENSIONS (W×H×D)	140.4cm×102.5cm×48.1cm (55-9/32"×40-11/32"×18-15/16")
NET WEIGHT	46kg (101.4lbs)
ACCESSORIES	AC CORD, MUSIC STAND

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

1. Warning

To prevent the risk of fire, smoke, or electrical shock and to ensure safe operation, please be sure to follow the safety guidelines below.

1. At places where special caution is required, the necessary safety precautions are clearly labeled or printed, for example, on the cabinet, or on the part concerned. Please follow these safety precautions, and also those listed in the Owner's Manual.
2. Parts which have a  mark in the circuit diagram or in the parts list are essential for safety. When replacing these parts, be sure to use only the specified parts.
3. Use the specified types for internal wiring (double-insulated wiring, etc.).
4. When replacing parts on the AC primary side (power transformer, electric switch, electrical cord, noise-prevention condenser, etc.), wind the lead wire and secure it by soldering.
5. Do not let the wiring come into contact with heat-emitting devices (fuse resistor, radiator plate, etc.).
6. When replacing the wiring, make sure that it is not in contact with

the unfinished or rough edge of a part.

7. When replacing the power cord (except for the plug-in type), tug it from various directions to confirm that it does not slip out of place.

8. Spacing

If soldering was done on the AC primary circuit, confirm that the interval between the soldered terminals or between the terminal and surrounding metallic parts is at least the minimum required (between the primary circuit and the chassis: at least 6.5 mm; between primary circuit terminals: at least 4.0 mm; between primary circuit terminals and secondary circuit terminals: at least 6.5 mm.).

2. Safety Precaution

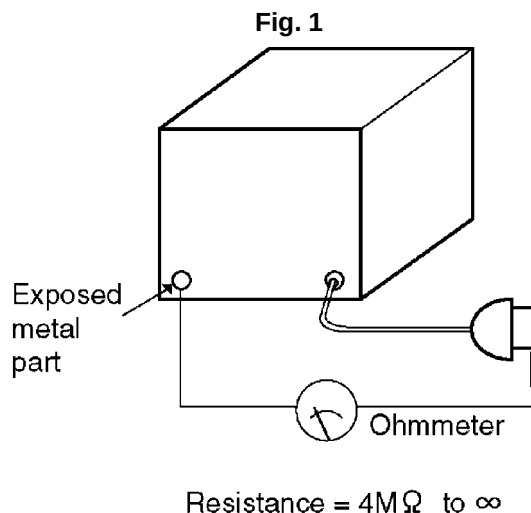
2.1. Safety Precaution

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only the manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

2.2. Insulation Resistance Test

1. Unplug the power cord and short the prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screw heads, connectors, control shafts, handle brackets, etc. Measurements should range from 4 MOhm to infinity for

allexposed parts. (refer to [Fig. 1](#))



3. How to Assemble the Piano

4. Sounds and Effects

5. Initial Setting

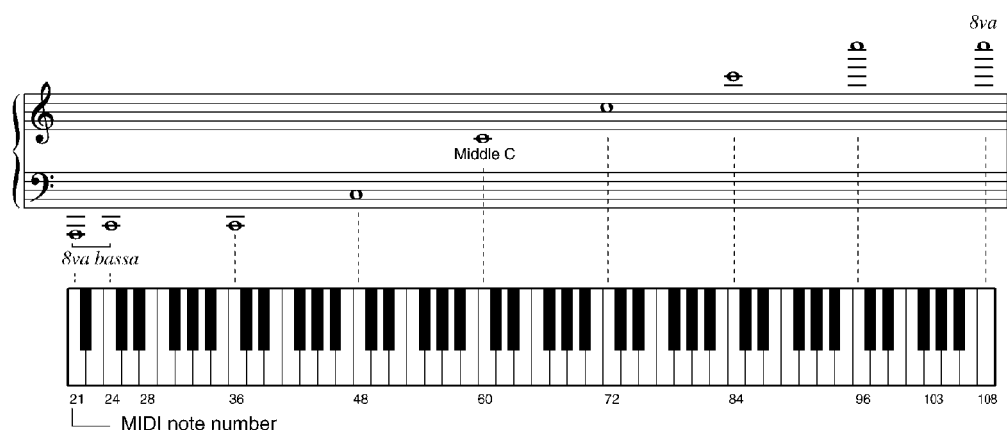
The following procedure resets all programmable settings, functions and memories to their initialized (factory-preset) status.

Use this procedure if the buttons, keys, etc. malfunction, or when you wish to reset the memories and functions.

1. Turn off the POWER button.
2. While pressing the INITIAL key at the same time, turn the POWER button on again.

Or, you can press the INITIAL key while the MODE SET button is pressed.

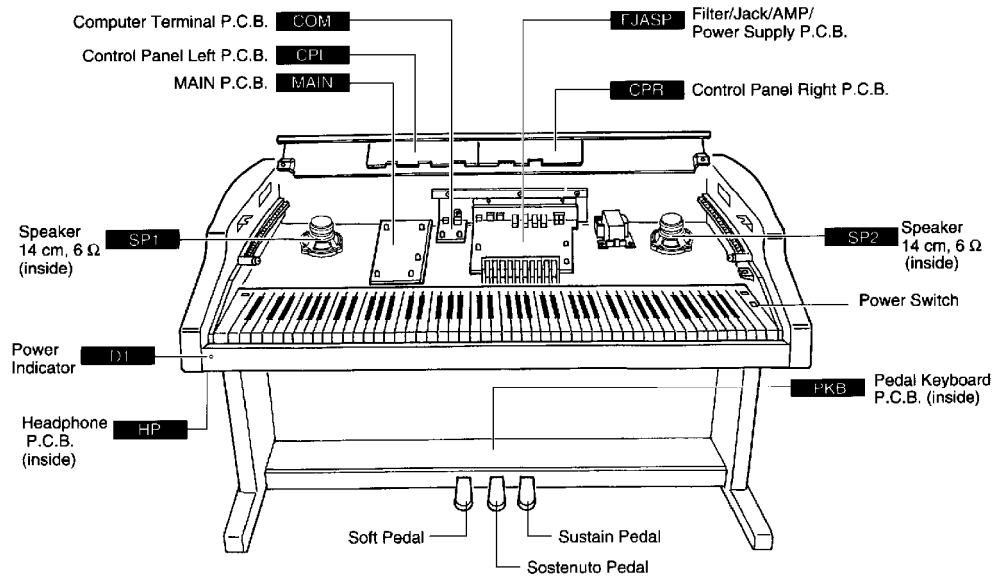
6. Keyboard Ranges and MIDI Note Number



7. Connections

8. Symptom which Apper to be Signs of Trouble

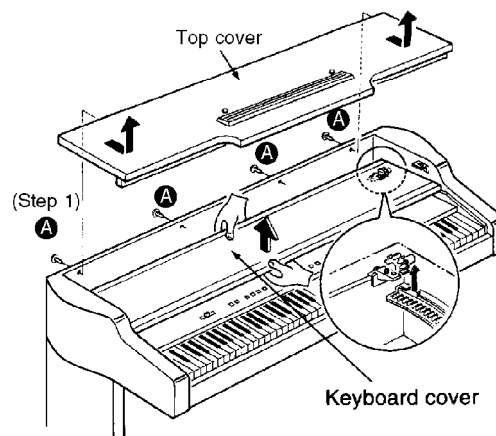
9. Parts Location



10. Disassembly Instructions

10.1. Removing the top cover and the keyboard cover

[Fig. 2]



(Step2)

Remove the top cover in the direction of arrows (refer to [\[Fig. 2\]](#)).

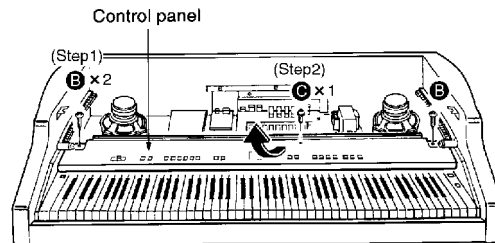
(Step3)

Remove the keyboard cover in the direction of arrow (refer to [\[Fig. 2\]](#)).

10.2. Removing the control panel

- Follow the (Step1)-(Step3) of item 10.1.

[Fig. 3]



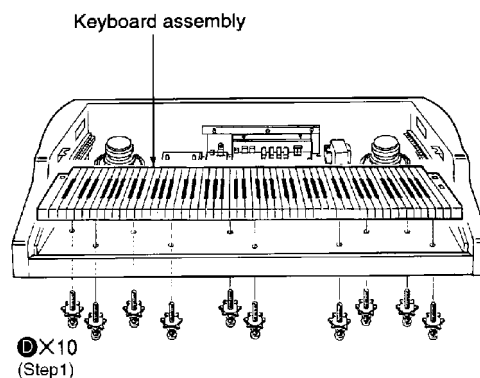
(Step3)

Slide the control panel forward and pull out in the direction of arrow (refer to [Fig. 3]).

10.3. Removing the keyboard assembly

- Follow the (Step1)-(Step3) of item 10.1.
- Follow the (Step1)-(Step3) of item 10.2.

[Fig. 4]



10.4. Disassembly and assembly of key(s)

- Follow the (Step1)-(Step3) of item 10.1.
- Follow the (Step1)-(Step3) of item 10.2.
- Follow the (Step1) of item 10.3.

10.4.1. Disassembly (white keys)

(Step1)

Insert the thin solid board between white key and black key, push the claw (refer to [Fig. 5]).

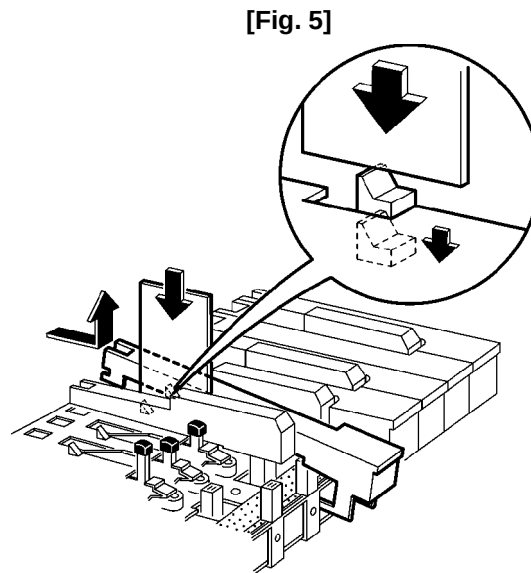
(Step2)

While pressing slightly the front of the key, push the rear of the key forward to disengage the key

claw from the chassis (refer to [\[Fig. 5\]](#)).

(Step3)

Lift the key and remove it.



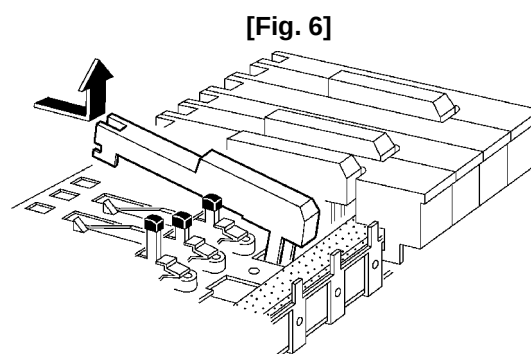
10.4.2. Disassembly (black keys)

(Step1)

While pressing slightly the front of the key, push the rear of the key forward to disengage the key claw from the chassis (refer to [\[Fig. 6\]](#))

(Step2)

Lift the key and remove it.



10.4.3. Assembly (both white and black keys)

(Step1)

Insert the front part of the key into the chassis.

(Step2)

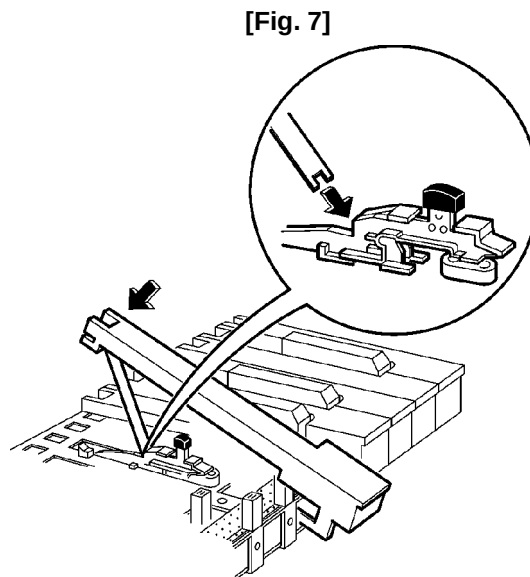
Insert the plate spring into the hammer notch (refer to [\[Fig. 7\]](#)).

(Step3)

While slowly lowering the key into the chassis, insert the plate spring into the notch at the rear of the key (refer to [\[Fig. 7\]](#)).

(Step4)

Carefully insert the key into the opening in the chassis and slide the key towards the rear to lock it in place (refer to [\[Fig. 7\]](#)).



10.5. Disassembly of the pedal assembly

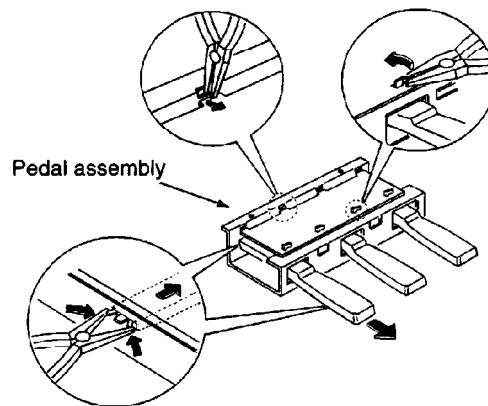
(Step1)

Remove the pedal assembly from the pedal box.

(Step2)

Disassemble the pedal assembly (refer to [\[Fig. 8\]](#)).

[Fig. 8]

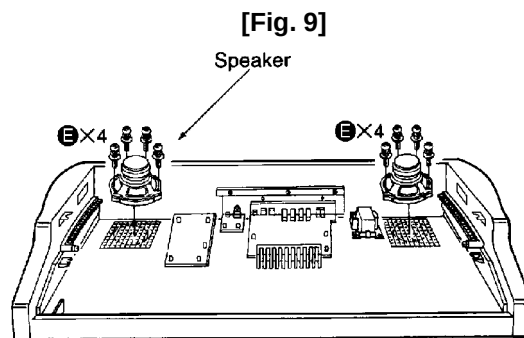


10.6. Removing the speakers

- Follow the (Step1)-(Step3) of item 10.1.

10.6.1. Removing the speakers

Remove 4 screws **E** (refer to [\[Fig. 9\]](#)).



10.7. Removing the printed circuit boards

- Follow the (Step1)-(Step3) of item 10.1.

- Pull out the connectors on the printed circuit boards.

10.7.1. Removing MAIN, FJASP and HP P.C.B.

- MAIN P.C.B.

(Step1)

Remove the ground wire holding screw **F** (refer to [\[Fig. 10\]](#)).

(Step2)

Release the claws of the 5 P.C.B. holders (refer to [\[Fig. 10\]](#)).

- FJASP P.C.B.

(Step1)

Remove the 4 screws **G** x2 and **H** x2 (refer to [\[Fig. 10\]](#)).

(Step2)

Release the claws of the 3 P.C.B. holders.

- HP P.C.B.

- Follow the item 10.3.

(Step1)

Remove the headphone jack mounting nuts **I** ×2 (refer to [\[Fig. 10\]](#)).

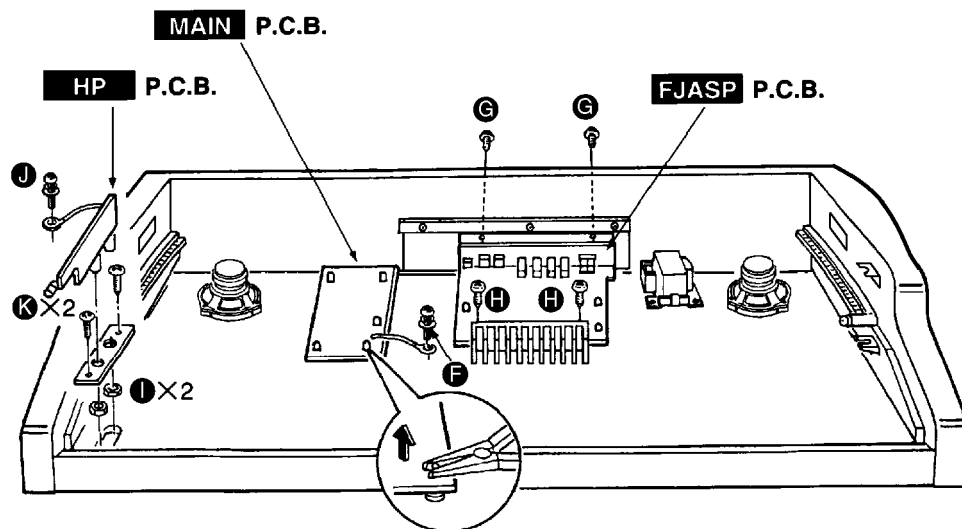
(Step2)

Remove the ground wire holding screw **J** (refer to [\[Fig. 10\]](#)).

(Step2)

Remove the HP P.C.B. mounting screws **K** ×2 (refer to [\[Fig. 10\]](#)).

[Fig. 10]



10.7.2. Removing CPL and CPR P.C.B.

- Follow the item 10.2.

- CPL P.C.B.

(Step1)

Pull the MAIN VOLUME knob (refer to [\[Fig. 11\]](#)).

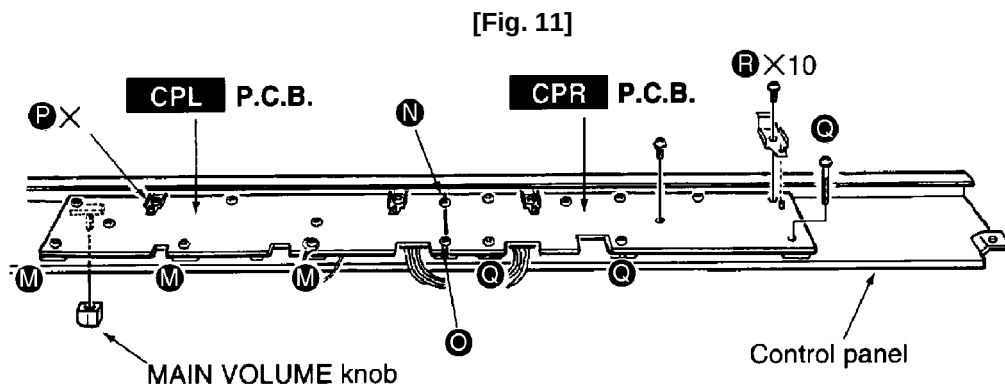
(Step2)

Remove the CPL P.C.B. mounting screws **M**×3, **N**×1, **O**×1 and **P**×10 (refer to [\[Fig. 11\]](#)).

- CPR P.C.B.

(Step1)

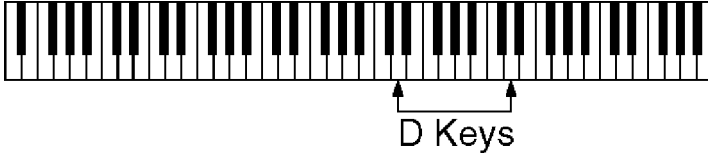
Remove the CPR P.C.B. mounting screws **N**×1, **O**×1, **Q**×3 and **R**×10 (refer to [\[Fig. 11\]](#)).

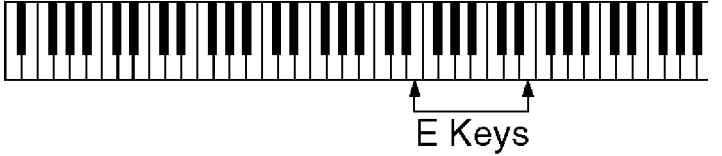
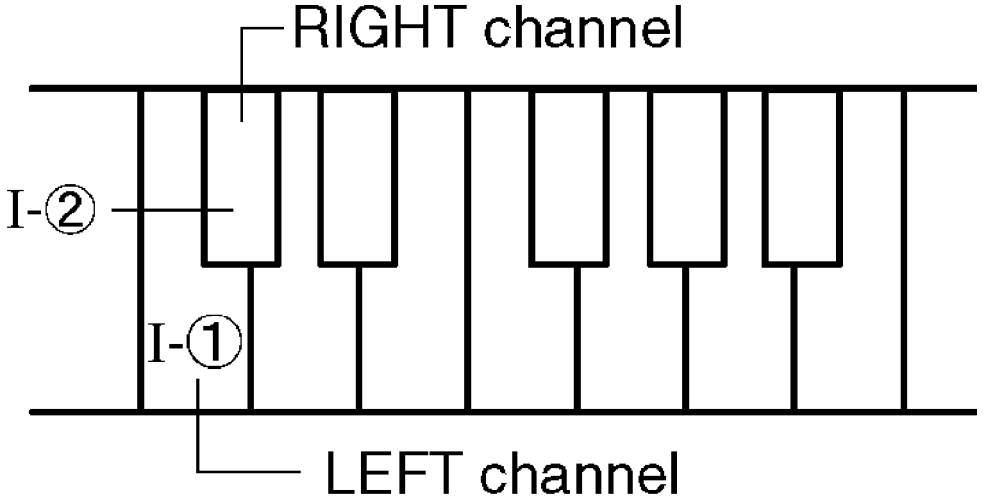


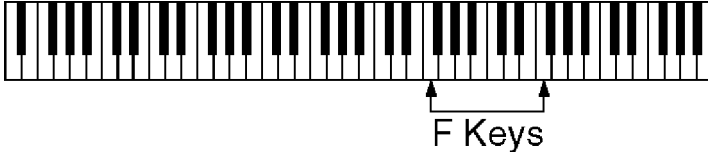
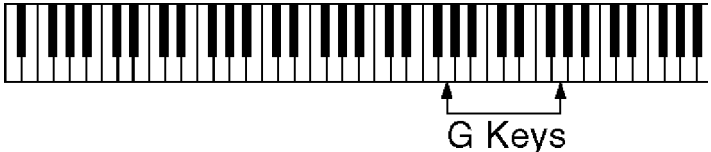
11. About the Self-Diagnostic Function

This model has some self-diagnostic capabilities. When set to the self-diagnostic mode, operation of various components can be verified by following the procedures in the chart below.

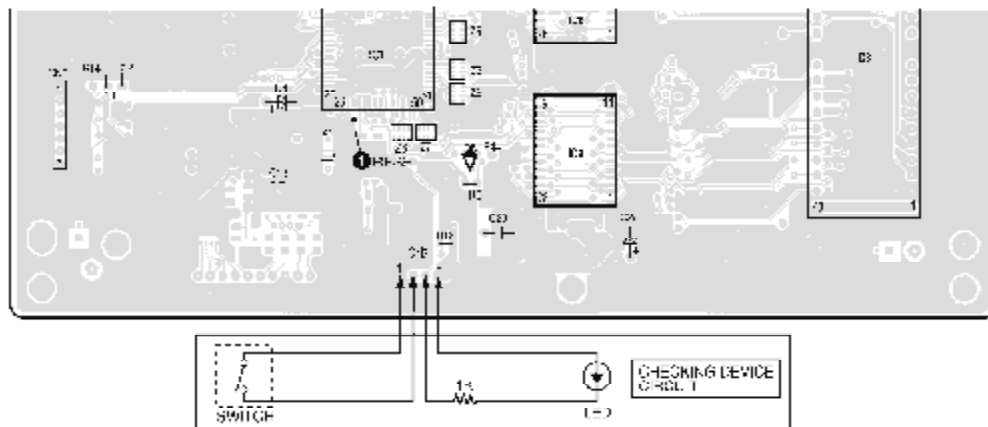
No.	PCB	TEST MODE	Procedure																								
1	MAIN	RAM (IC8, 9), ROM (IC6) check	1. Connect the CHECKING DEVICE to CN9 on the MAIN P turn on the CHECKING DEVICE switch. 2. Turn on the power switch.																								
		When the power switch is turned on, the LED of the CHECKING DEVICE flashes 8 tir first 4 flashes are for the RAM check , and the latter 4 flashes are for the ROM check. order of theLED flashes correspond to the respective IC numbers as shown below. I defective, the corresponding flash time is longer.																									
Examples		1. RAM OK, ROM OK 2. RAM OK, ROM (IC6) defective 3. RAM (IC8, 9) defective, ROM OK NOTE : ● indicates short flash time — indicates long flash time RAM <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>1</td><td>2</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>—</td><td>●</td></tr><tr><td>—</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr></table> ↑ ↑ IC8 IC9 IC6		1	2	3	4	1	2	●	●	●	●	●	●	●	●	●	●	—	●	—	●	●	●	●	●
1	2	3	4	1	2																						
●	●	●	●	●	●																						
●	●	●	●	—	●																						
—	●	●	●	●	●																						

No.	PCB	TEST MODE	Procedure																								
2	CPL	CPU (IC1) check	1. Connect the CHECKING DEVICE to CN9 on the MAIN P. Checking Device switch should be off). 2. Press and hold the two D keys shown below, and then the power switch.  When the power switch is turned on, the LED of the CHECKING DEVICE flashes 4 times. The order of the LED flashes corresponds to the CPU (IC) on the respective P.C.B.s as shown below. If an IC is defective, the corresponding flash time is longer. <table border="0"> <tr> <td>1. IC1 OK</td> <td>→</td> <td>1</td> <td>2</td> </tr> <tr> <td></td> <td></td> <td>●</td> <td>—</td> </tr> <tr> <td>2. IC1 defective</td> <td>→</td> <td></td> <td>—</td> </tr> <tr> <td></td> <td></td> <td>—</td> <td>—</td> </tr> <tr> <td></td> <td></td> <td>↑</td> <td></td> </tr> <tr> <td></td> <td></td> <td>CPU (IC1)</td> <td></td> </tr> </table> NOTE : ● indicates short flash time — indicates long flash time	1. IC1 OK	→	1	2			●	—	2. IC1 defective	→		—			—	—			↑				CPU (IC1)	
1. IC1 OK	→	1	2																								
		●	—																								
2. IC1 defective	→		—																								
		—	—																								
		↑																									
		CPU (IC1)																									

No.	PCB	TEST MODE	Procedure
3	MAIN	Wave ROM check MAIN: IC12	1. Press and hold the two E keys shown below, and then the power switch. 2. Select the UPRIGHT sound. 3. Reduce the MAIN VOLUME level low enough.  When set to the self-diagnostic mode, the Wave ROM outputs a sine wave. The Wave correspond to the keyboard keys as shown in the diagram to the right. When a key is pressed, the corresponding sine wave sound is produced. If no sound is produced, or if the sound is distorted, the Wave ROM corresponding to that key is defective. This method allows diagnosis of the output routes (L/R) from the Wave ROM. The key number indicates the Wave ROM number (I-① : IC12, I-② : IC18) 

No.	PCB	TEST MODE	Procedure
4	CPL / CPR	Control Panel buttons LED lighting check	Press and hold the two F keys shown below, and then turn power switch.  F Keys
		Press the buttons on the control panel and confirm that the corresponding LEDs light	
5		Control Panel LED display check	Press and hold the two G keys shown below, and then turn power switch.  G Keys
		The numbers are displayed automatically and repeatedly on the display.	

■ Connection between serving CHECKING DEVICE and MAIN P.C.B.



12. MIDI Implementation Chart

13. Precautions before Servicing

13.1. Precautions for measuring of the output waveforms

1. The waveform was measured with a “National Digital Storage Oscilloscope VP-5730A”. Therefore the waveforms of musical tone signals shown may differ somewhat due to the difference in the timing of triggering.
2. Since the 1/10 test probe is used, the indicated voltage value on the bottom part of each waveform illustration is 1/10 of the actual value (e.g. 0.2 V/cm should be 2.0 V/cm).

3. To measure the waveforms, first set this unit to the service diagnostic mode (refer to “WAVE ROM test”). The WAVE ROM output will then be output as a sine wave to facilitate the servicing check.

13.2. Important safety notice

- Components identified by a  mark have special characteristics important for safety.
- When replacing any of these components, use only manufacture’s specified parts.

13.3. Symbolic Marks

The symbolic marks for resistors and capacitors which used in this circuits are classified as following [Table-1](#) and [Table-2](#) .

13.3.1. RESISTORS

- Resistors without symbolic mark are FIXED CARBON FILM RESISTORS (ERD-type).
- All resistors are 1/4 WATT, $\pm 5\%$ TOLERANCE unless otherwise designated in schematic diagrams.

Table-1

SYMBOL	SPECIFICATION
	Fixed Carbon Film Resistors “FLAME-PROOF” (ERD—F—type)
	Fixed Wire Wound Resistors “FLAME-PROOF” (ERF—type)
	Fixed Metal Oxide Film Resistors “FLAME-PROOF” (ERG—type)
	Fixed Metal Film Resistors “FLAME-PROOF” (ERX—type)
	Fixed Metal Film Resistors (Precision and High Stability) (ERO—type)
	Fuse Type Fixed Metal Oxide Film Resistors “FLAME-PROOF” (ERQ—type)
	Fuse Type Fixed Carbon Film Resistors “FLAME-PROOF” (ERD2FC—type)

13.3.2. CAPACITORS

- Capacitors without symbolic mark are POLYESTER CAPACITORS. (ECQM-type, ECQG-type, $\pm 10\%$ Tolerance)
- Polarized capacitors without symbolic mark are Aluminum Electrolytic Capapcitors. (ECEA-type, $\pm 20\%$ Tolerance)

Table-2

SYMBOL	SPECIFICATION	TYPE
	Non-Polarized Electrolytic Capacitors	ECEA_KN_type
	Non-Polarized Electrolytic (for Network system)	ECEA_Y_type
	Tantalum Solid Electrolytic Capacitors	ECS_type
	Metalized Plastic Film Capacitors (TF Series)	ECQV_type
	Temperature Compensating Ceramic Capacitors	ECC_type
	High-Dielecytric Constant Ceramic Capacitors	ECK_type ECR_type
	Axial Lead Ceramic Capacitors	ECB_type
	Metalized Polyester Film Capacitors for Across the Line	ECQ_EW_type
	Aluminum Electrolytic Capacitors for Smoothing Circuit	ECES_type
	Multilayer Ceramic Chip Capacitors	ECUV_type

14. Measuring Condition

Note

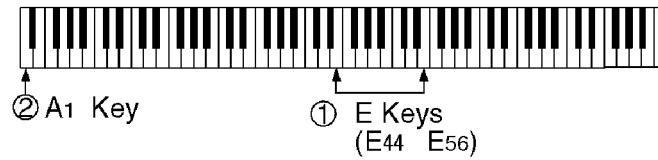
When measuring the waveforms, set this piano's state as Fig.2 in "10. Disassembly Instructions".

14.1. Measuring Condition of MAIN P.C.B.

Check point ② - ⑤

Set to the self-diagnostic mode followings.

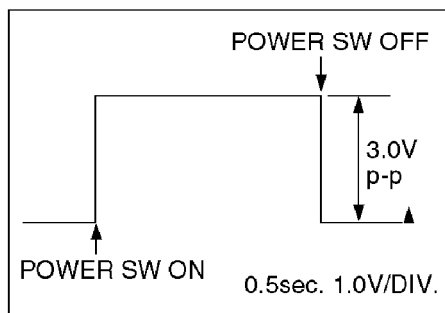
- While pressing two E keys (①) simultaneously, turn on the power switch.
- SOUND CONCERT GRAND
- Main Volume MAX
- Keyboard A1 (②)



Check point ①

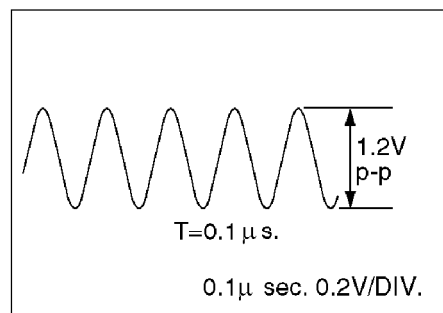
Set the initial setting mode (refer to "5, Initial Setting").

① RESET

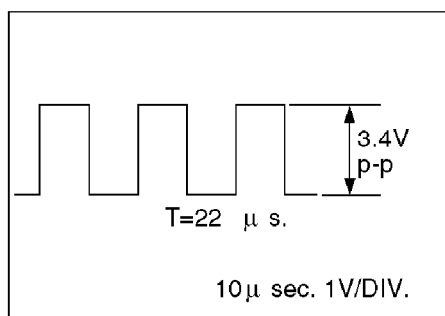


- Power SW ON → OFF

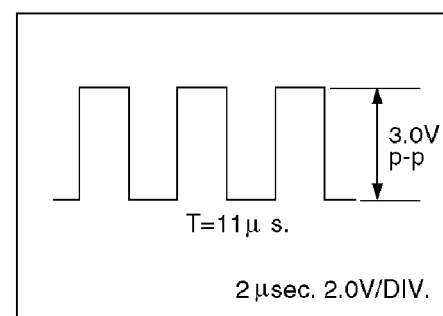
② TG CLOCK



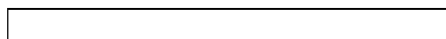
③

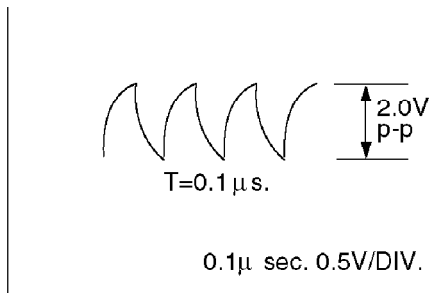


④



⑤





14.2. Measuring Condition of FJASP P.C.B.

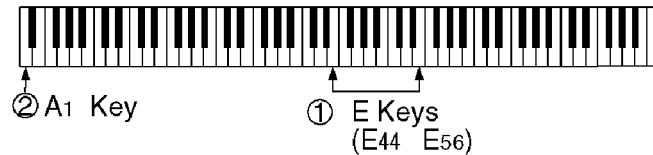
Note

When measuring the waveforms, set this piano's state as Fig.2 in "10. Disassembly Instructions".

Check point ③ - ③

Set the self-diagnostic mode followings.

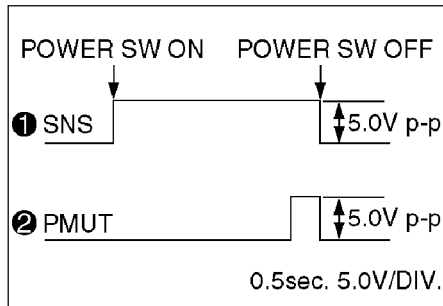
- While pressing two E keys (①) simultaneously, turn on the power switch.
- SOUND CONCERT GRAND
- Main Volume MAX
- Keyboard A1 (②)



Check point ①, ②

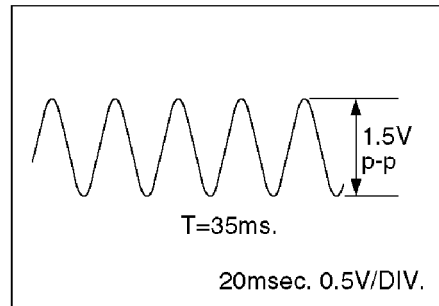
Set the initial setting mode (refer to "5, Initial Setting").

① SNS, ② PMUT

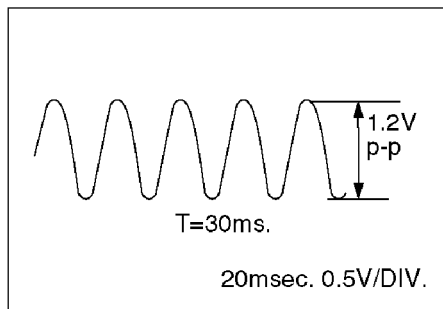


• Power SW ON → OFF

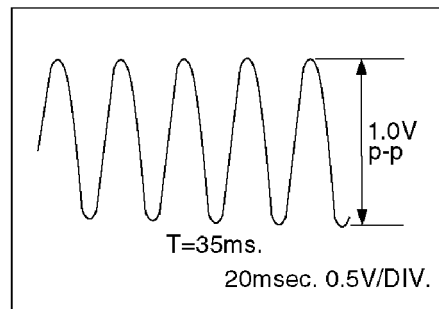
③ SUML, ④ SUMR



⑤ HPL, ⑥ HPR



⑦ SPL, ⑧ SPR



15. Schematic Diagram

16. Printed Circuit Board Diagram

17. Block Diagram

18. Wiring Connection Diagram

19. Replacement Parts List

Notes:

***Important safety notice:** / Components identified by  mark have special characteristics important for safety. / Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. / When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list. / ***Warning:** This product uses a laser diode. Refer to caution statements.

***ACHTUNG:** Die Lasereinheit nicht zerlegen. Die Lasereinheit darf nur gegen eine vom Hersteller spezifizierte Einheit ausgetauscht werden.

***Capacity values** are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F) / ***Resistance values** are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM)

***The marking <RTL>** indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

****1-7** in Remarks indicate the areas.

[*1: except (P) area, *2: except (P, GT, GH) areas, *3: (EX, EG, EQ, GU, GT) areas, *4: (EX, GU, GW, GH, GT) areas, *5: (GU, GW, GM, GT, GH) areas, *6: (EX, EG, EQ, EB, GN) areas, *7: except (P, PC) areas.]

***[SPC]** in Remarks columns parts that are supplied by S.P.C..

***Since SW** consists of buttons and P.C.B.s, we do not supply it as an individual part (refer to "21. Manual Keyboard Parts Location").

****<IA>-<IE>**, marks in Remarks indicate languages of instruction manuals. [<IA>: English, <IB>: French/ Netherlands/ Italy, <IC>: English/ Spanish/ Chinese/ Danish, <ID>: German, <IE>: American English]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
<u>1</u>	QKQGD149AAZ	CROSSBOARD	1	[SPC](K)
1	QKQGD149ABZ	CROSSBOARD	1	[SPC](M)
<u>2</u>	QYKG287AAZ	CABINET ASS'Y	1	[SPC](P)(K)
2	QYKG287ACZ	CABINET ASS'Y	1	[SPC](P)(M)
2	QYKG287ABZ	CABINET ASS'Y	1	[SPC](K)*1
2	QYKG287ADZ	CABINET ASS'Y	1	[SPC](M)*2
<u>3</u>	XNS12	NUT	2	[SPC]
4	XTN4+16F	SCREW	1	[SPC]
5	QHDG021AA	SCREW	10	[SPC]
<u>6</u>	K2AA2G000003	AC INLET COVER	1	[SPC]*7 
6	SJS9334A	AC INLET COVER	1	[SPC](P,PC) 
<u>7</u>	QHWG007AA	NUT	2	[SPC]
<u>8</u>	QKQGA148AAZ	TOP COVER ASS'Y	1	[SPC](K)
8	QKQGA148ABZ	TOP COVER ASS'Y	1	[SPC](M)
<u>8-1</u>	QMRG7021AA	BUSH	2	[SPC](K)
8-1	QMRG7021AB	BUSH	2	[SPC](M)
<u>8-2</u>	QMFG1274AA	FELT	3	[SPC]
<u>8-3</u>	QMFG1057AA	FELT	4	[SPC]
<u>8-4</u>	SGBG160B	TECHNICS BADGE	1	[SPC]
<u>9</u>	QKQGF040AAZ	KEYBOARD COVER ASS'Y	1	[SPC](K)
9	QKQGF040ABZ	KEYBOARD COVER ASS'Y	1	[SPC](M)
<u>9-1</u>	QMRG7056AA	HOLDER	2	[SPC]
<u>9-2</u>	QWBG0002AA	HOLDER	1	[SPC]
<u>9-3</u>	QXQG007AA	AXLE TREE	1	[SPC]
<u>9-4</u>	QMAG0278AA	ORNAMENT	1	[SPC]
<u>9-5</u>	QMRG7031EC	PROTECTOR(L)	1	[SPC]
<u>9-6</u>	QMRG7032EC	PROTECTOR(R)	1	[SPC]
9-7	XTB3+6A	SCREW	6	[SPC]
9-8	XTW3+8MFZ	SCREW	6	[SPC]
9-9	XTB4+6B	SCREW	2	[SPC]
<u>9-10</u>	QGKG0135AA	ORNAMENT	1	[SPC](K)
9-10	QGKG0135AB	ORNAMENT	1	[SPC](M)
10	XTW3+14TFZ	SCREW	2	[SPC]
<u>11</u>	QYAG1049AAZ	MUSIC STAND ASS'Y	1	[SPC](K)
11	QYAG1049ABZ	MUSIC STAND ASS'Y	1	[SPC](M)
<u>11-1</u>	SBLG230A	STAY	2	[SPC]
11-2	XTB3+10AFZ	SCREW	2	[SPC]
11-3	XTT4+10AFZ	SCREW	2	[SPC]
12	XTT4+12AFZ	SCREW	2	[SPC]
13	XTT4+20A	SCREW	8	[SPC]
14	XTV3+10JFZ	SCREW	1	[SPC]
15	XYA35+JA12	SCREW	10	[SPC]
16	XYN4+F16	SCREW	4	[SPC]
17	GTT4+25AFZ	SCREW	4	[SPC]
18	XTW3+20TFZ	SCREW	7	[SPC]
23	XTT4+14A	SCREW	2	[SPC]
24	QHDG067AA	SCREW	6	[SPC]
<u>26</u>	QGPG0106AA	LED PANEL	1	[SPC]
<u>27</u>	QGPG0123BB	BUTTON	1	[SPC]
<u>28</u>	QGPG0124AB	BUTTON	1	[SPC]
<u>29</u>	QGPG0125FB	CONTROL PANEL	1	[SPC]
<u>30</u>	QMCG004AA	SPACER	4	[SPC]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
31	QMFG1283AA	FELT	1	[SPC]
32	QMRG5229AA	CUSHION	1	[SPC]
33	QMRG5230AA	CUSHION	1	[SPC]
34	SBNG7050A	KNOB	1	[SPC]
35	XTW3+10Q	SCREW	14	[SPC]
36	QKQGB563AAZ	LEFT PLANK ASS'Y	1	[SPC](K)
36	QKQGB563ABZ	LEFT PLANK ASS'Y	1	[SPC](M)
36-1	XTT4+25A	SCREW	3	[SPC]
37	QKQGB564AAZ	RIGHT PLANK ASS'Y	1	[SPC](K)
37	QKQGB564ABZ	RIGHT PLANK ASS'Y	1	[SPC](M)
37-1	XTT4+25A	SCREW	3	[SPC]
39	XTT4+14A	SCREW	2	[SPC]
40	XYN4+F16FZ	SCREW	2	[SPC]
41	QKQGM118AAZ	PEDAL BOX ASS'Y	1	[SPC](K)
41	QKQGM118ABZ	PEDAL BOX ASS'Y	1	[SPC](M)
41-1	QGKG0113AA	ORNAMENT	3	[SPC]
43	XTV3+10C	SCREW	12	[SPC]
44	QHDG016AB	SCREW	4	[SPC]
45	QHDG032AB	SCREW	4	[SPC]
46	XTB35+14A	SCREW	1	[SPC]
47	SHRG1230A	CLAMPER	1	[SPC]
48	SHRG9620A	CORD CLAMPER	1	[SPC]
49	QMBG009AA	SPRING	3	[SPC]
50	QMFG1133AA	FELT	3	[SPC]
51	QMFG1134AA	FELT	3	[SPC]
52	QMWG4001AA	PEDAL ARM	3	[SPC]
53	QMFG1135AA	FELT	3	[SPC]
54	QKAG0011AA	FOOT	1	[SPC]
55	QMRG7086AA	LID GUIDE	2	[SPC]
56	XYN6+F16FZ	SCREW	2	[SPC]
101	XTV3+12G	SCREW	4	[SPC]
102	XTV3+20JFZ	SCREW	2	[SPC]
103	QGPG0138BB	END COVER PANEL,RIGHT	1	[SPC]
104	QGUG1040AA	BUTTON,POWER	1	[SPC]
106	QMC011CA	SPRING	88	[SPC]
107	QMFG1265AA	FELT	2	[SPC]
108	QMFG1266BA	FELT	4	[SPC]
109	QMFG1267BA	FELT	2	[SPC]
110	QMFG1268BA	FELT	2	[SPC]
111	QMGG060BA	RUBBER CAP(HAMMER)	88	[SPC]
112	QMWG1041AA	WHITE KEY(FIRST OCTAVE A)	1	[SPC]
113	QMWG1042AA	WHITE KEY(B KEY)	8	[SPC]
114	QMWG1043AA	WHITE KEY(C KEY)	7	[SPC]
115	QMWG1044AA	WHITE KEY(D KEY)	7	[SPC]
116	QMWG1045AA	WHITE KEY(E KEY)	7	[SPC]
117	QMWG1046AA	WHITE KEY(F KEY)	7	[SPC]
118	QMWG1047AA	WHITE KEY(G KEY)	7	[SPC]
119	QMWG1048AA	WHITE KEY(A KEY)	7	[SPC]
120	QMWG1049AA	WHITE KEY(TOP OCTAVE C)	1	[SPC]
121	QMWG2006AA	BLACK KEY	36	[SPC]
122	QMWG6020AA	RUBBER SWITCH(12KEY)	7	[SPC]
123	QMWG6021AA	RUBBER SWITCH(4KEY)	1	[SPC]
124	QMWG8040AA	FULCURUM(12 PCS,ON ONE)	7	[SPC]
125	QMWG8045AA	KEY GUIDE	88	[SPC]

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
126	QMWG8038AA	HAMMER SUPPORT(WHITE KEY)	52	[SPC]
127	QMWG9025AA	HAMMER(WHITE KEY)	12	[SPC]
128	QMWG9025AB	HAMMER(WHITE KEY)	19	[SPC]
129	QMWG9025AC	HAMMER(WHITE KEY)	11	[SPC]
130	QMWG9025AD	HAMMER(WHITE KEY)	10	[SPC]
131	QMWG8039BA	HAMMER SUPPORT(BLACK KEY)	36	[SPC]
132	QMWG9027AA	HAMMER(BLACK KEY)	8	[SPC]
133	QMWG9027AB	HAMMER(BLACK KEY)	14	[SPC]
134	QMWG9027AC	HAMMER(BLACK KEY)	7	[SPC]
135	QMWG9027AD	HAMMER(BLACK KEY)	7	[SPC]
136	XTW3+10T	SCREW	14	[SPC]
137	XTB35+12A	SCREW	2	[SPC]
138	QGGP0139BB	END COVER PEDAL,LEFT	1	[SPC]
139	QMFG1104AA	FELT	2	[SPC]
140	QMWG8041AA	FULCURUM(4 PCS,ON ONE)	1	[SPC]
A1	QJAG0028AA	AC CORD	1	[SPC](EB,GH) 
A1	QJAG031AA	AC CORD	1	[SPC](GW) 
A1	RJA0035-1X	AC CORD	1	[SPC](GN) 
A1	RJA0065-A	AC CORD	1	K2CB2CB00006 [SPC](P,PC) 
A1	SJAG65	AC CORD	1	K2CR2ED00001 [SPC]*3 
A2	QQFGPX662FB	FUNBAG UNIT	1	[SPC](EB)<IA>
A2	QQFGPX662GB	FANBAG UNIT	1	[SPC](GN,GM)<IA>
A2	QQFGPX662BB	FUNBAG UNIT	1	[SPC](PC)<IA><IB>
A2	QQFGPX662DB	FUNBAG UNIT	1	[SPC](EG)<IB><ID>
A2	QQFGPX662CB	FUNBAG UNIT	1	[SPC]*4<IC>
A2	QQFGPX662AB	FUNBAG UNIT	1	[SPC](P)<IE>
A2	QQFGPX662EB	FUNBAG UNIT	1	[SPC](EQ)<ID>
A3	SJP5213-2	PLUG ADAPTOR	1	K2DR42E00003 [SPC](GU,GT)
C1	ECEA0JKS101	6.3V 100U	1	[SPC]CPL
C1	ECKCVA1472MF	4700P	1	F1B2H4720008 [SPC]FAJSP 
C1	ECKF1E473ZV	25V 0.047U	1	[SPC]HP
C1	ECRR1H104ZF	50V 0.1U	1	[SPC]PKB
C1	ECRR1H104ZF1	50V 0.1U	1	F1E1H1040023 [SPC]MKB1
C1	ECUV1C224KBX	16V 0.22U	1	[SPC]MAIN
C2	ECKF1E473ZV	25V 0.047U	1	[SPC]HP
C2	ECQU2A104MN	0.1U	1	[SPC]FAJSP 
C2	ECUV1C224KBX	16V 0.22U	1	[SPC]MAIN
C2	QCBG1H104ZFA	50V 0.1U	1	F1E1H104A001 [SPC]CPL
C3	ECRR1H104ZF	50V 0.1P	2	[SPC]MAIN,HP
C3	ECBA1E223ZF5	25V 0.022U	1	ECBT1E223ZF5 [SPC]CPL
C4	ECA1VM332	35V 3300U	1	[SPC]FAJSP
C4	ECEA0JKA470	6.3V 47U	1	[SPC]MKB1
C4	ECEA0JKS101	6.3V 100U	1	[SPC]CPL
C4	ECEA1HKA010	50V 1U	1	[SPC]MAIN
C5	ECRR1H104ZF1	50V 0.1	1	F1E1H1040023 [SPC]MKB2
C6	ECA1VM332	35V 3300U	1	[SPC]FAJSP
C6	ECRR1H104ZF1	50V 0.1U	1	F1E1H1040023 [SPC]MKB1
C7	ECRR1H104ZF	50V 0.1	1	[SPC]MKB2

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C7	QCBG1H104ZFA	50V 0.1U	1	F1E1H104A001 [SPC]CPL
C8	ECRR1H104ZF	50V 0.1P	1	[SPC]FAJSP
C8	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C9	ECRR1H104ZF	50V 0.1P	1	[SPC]FAJSP
C9	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C10	ECEA1CKA100	16V 10U	1	[SPC]FAJSP
C10	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C10	QCBG1H104ZFA	50V 0.1U	1	F1E1H104A001 [SPC]CPL
C11	ECA1CM101	16V 100P	1	ECA1CM331 [SPC]FAJSP
C12	ECEA1HKN010	50V 1U	1	[SPC]FAJSP
C13	ECCR1H221J5	50V 220P	1	[SPC]FAJSP
C14	ECEA1HKN010	50V 1U	1	[SPC]FAJSP
C15	ECCR1H221J5	50V 220P	1	[SPC]FAJSP
C15	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C16	ECQB1H222JF	50V 0.0022U	1	[SPC]FAJSP
C16	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C17	ECQB1H154JF3	50V 0.15U	1	[SPC]FAJSP
C17	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C18	ECQG1H472KZ	50V 0.0047U	1	F0A1H472A026 [SPC]FAJSP
C19	ECEA1HKN010	50V 1U	1	[SPC]FAJSP
C19	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C20	ECQB1H333JF	50V 0.033U	1	[SPC]FAJSP
C20	ECUV1C224KBX	16V 0.22U	1	[SPC]MAIN
C21	ECQV1H104JM3	50V 0.1U	1	[SPC]FAJSP
C22	ECQG1H222KZ	50V 0.0022U	1	F0A1H222A026 [SPC]FAJSP
C23	ECEA1HSN010	50V 1U	1	[SPC]FAJSP
C24	ECQG1H682KZ	50V 0.0068U	1	F0A1H682A026 [SPC]FAJSP
C25	ECQG1H223KZT	50V 0.022U	1	F0A1H223A025 [SPC]FAJSP
C26	ECQG1H222KZ	50V 0.0022U	1	F0A1H222A026 [SPC]FAJSP
C27	ECQB1H682JF3	50V 0.0068U	1	[SPC]FAJSP
C27	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C28	ECEA1CKA470	16V 47P	1	[SPC]MAIN
C28	ECQG1H102KZ	50V 0.001U	1	F0A1H102A026 [SPC]FAJSP
C29	ECQB1H222JF	50V 0.0022U	1	[SPC]FAJSP
C29	EECS5R5V105	5.2V 1U	1	[SPC]MAIN
C30	ECEA1HKN010	50V 1U	1	[SPC]FAJSP
C30	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C31	ECQB1H333JF	50V 0.033U	1	[SPC]FAJSP
C32	ECQB1H154JF3	50V 0.15U	1	[SPC]FAJSP
C33	ECQG1H472KZ	50V 0.0047U	1	F0A1H472A026 [SPC]FAJSP
C34	ECEA1HSN010	50V 1U	1	[SPC]FAJSP
C35	ECQG1H682KZ	50V 0.0068U	1	F0A1H682A026 [SPC]FAJSP
C36	ECQV1H104JM3	50V 0.1U	1	[SPC]FAJSP
C36	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C37	ECQG1H222KZ	50V 0.0022U	1	F0A1H222A026 [SPC]FAJSP
C37	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C38	ECQG1H223KZT	50V 0.022U	1	F0A1H223A025 [SPC]FAJSP
C38	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C39	ECQG1H222KZ	50V 0.0022U	1	F0A1H222A026 [SPC]FAJSP
C39	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C40	ECQB1H682JF3	50V 0.0068U	1	[SPC]FAJSP
C40	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C41	ECQG1H102KZ	50V 0.001U	1	F0A1H102A026 [SPC]FAJSP
C41	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C42	ECCR1H100D5	50V 10P	1	[SPC]FAJSP
C42	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C43	ECCR1H100D5	50V 10P	1	[SPC]FAJSP
C43	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C44	ECQV1H224JM	50V 0.22U	1	[SPC]FAJSP
C44	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C45	ECQB1H223JF	50V 0.022U	1	[SPC]FAJSP
C45	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C46	ECQV1H104JM	50V 0.1U	1	[SPC]FAJSP
C46-48	ECUV1H104ZFX	50V 0.1U	3	[SPC]MAIN
C49	ECQV1H224JM	50V 0.22U	1	[SPC]FAJSP
C49	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C50	ECQB1H223JF	50V 0.022U	1	[SPC]FAJSP
C50	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C51	ECQV1H104JM	50V 0.1U	1	[SPC]FAJSP
C51	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C54	ECBT1C222MR5	16V 2200P	1	F1D1C222A002 [SPC]FAJSP
C54	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C55	ECBT1C222MR5	16V 2200P	1	F1D1C222A002 [SPC]FAJSP
C55	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C56	ECRR1H104ZF	50V 0.1P	1	[SPC]FAJSP
C56	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C57	ECRR1H104ZF	50V 0.1P	1	[SPC]FAJSP
C57	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C58	ECBT1C222MR5	16V 2200P	1	F1D1C222A002 [SPC]FAJSP
C58	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C59	ECBT1C222MR5	16V 2200P	1	F1D1C222A002 [SPC]FAJSP
C60	ECRR1H104ZF	50V 0.1P	1	[SPC]FAJSP
C60	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C62	ECEA1CKA100	16V 10	1	[SPC]MAIN
C63,64	ECUV1H104ZFX	50V 0.1U	2	[SPC]MAIN
C65	ECCR1H221J5	50V 220P	1	[SPC]FAJSP
C65	ECEA1CKA100	16V 10	1	[SPC]MAIN
C66	ECEA1HKNR47	50V 0.47U	1	[SPC]MAIN
C66	ECKR1E473ZV	25V 0.047U	1	[SPC]FAJSP
C67	ECEA1HKNR47	50V 0.47U	1	[SPC]MAIN
C73	QCBG1H104ZFA	50V 0.1U	1	F1E1H104A001 [SPC]FAJSP
C77	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C78-82	ECUV1H101JG	50V 100P	5	[SPC]MAIN
C83	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C84	ECEA0JKA101	6.3V 100	1	[SPC]MAIN
C85,86	ECUV1H101JG	50V 100P	2	[SPC]MAIN
C87	ECRR1H104ZF	50V 0.1P	1	[SPC]MAIN
C88	ECA1VM470	35V 47U	1	[SPC]MAIN
C89	ECRR1H104ZF	50V 0.1P	1	[SPC]MAIN
C90	ECUV1H101JG	50V 100P	1	[SPC]MAIN
C91	ECA0JM102	6.3V 1000U	1	[SPC]MAIN
C94,95	ECUV1H102JX	50V 0.001U	2	[SPC]MAIN
C98	ECEA1CKA100	16V 10	1	[SPC]MAIN
C99,00	ECUV1H104ZFX	50V 0.1U	2	[SPC]MAIN
C101	ECEA1CKA100	16V 10	1	[SPC]MAIN
C105,06	ECEA1HKNR47	50V 0.47U	2	[SPC]MAIN
C107	ECUV1H101JG	50V 100P	1	[SPC]MAIN
C108	ECRR1H104ZF	50V 0.1P	1	[SPC]MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C109	ECUV1H101JG	50V 100P	1	[SPC]MAIN
C110	ECRR1H104ZF	50V 0.1P	1	[SPC]MAIN
C111	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C116	ECEA0JKA101	6.3V 100	1	[SPC]MAIN
C117	ECUV1H104ZFX	50V 0.1U	1	[SPC]MAIN
C120,21	ECUV1H221JG	50V 220P	2	[SPC]MAIN
CN1	QJTG016050AA	CONNECTOR(5P)	1	[SPC]PKB
CN1	QJUG00212AA	CONNECTOR(12P)	1	[SPC]MAIN
CN1	SJPG2JS050A	CONNECTOR(5P)	1	[SPC]CPL
CN1	SJPG7JS020A	CONNECTOR(2P)	1	[SPC]FAJSP
CN2	QJUG00703AA	CONNECTOR(3P)	1	[SPC]HP
CN2	SJPG1JS060A	CONNECTOR(6P)	1	[SPC]MAIN
CN2	SJPG2JS160A	CONNECTOR(16P)	1	[SPC]CPL
CN2	SJPG7JS040A	CONNECTOR(4P)	1	[SPC]FAJSP
CN3	SJPG1JS050A	CONNECTOR(5P)	1	[SPC]MAIN
CN3	SJPG2JS160A	CONNECTOR(16P)	1	[SPC]CPR
CN3	SJPG7JS030A	CONNECTOR(3P)	1	[SPC]FAJSP
CN4	QJTG01812AA	CONNECTOR(12P)	1	[SPC]MKB2
CN4	SJPG1JS060A	CONNECTOR(6P)	1	[SPC]FAJSP
CN4	SJPG1JS160A	CONNECTOR(16P)	1	[SPC]MAIN
CN4	SJPG2JS060A	CONNECTOR(6P)	1	[SPC]CPL
CN5	QJTG01012AA	CONNECTOR(12P)	1	[SPC]FAJSP
CN6	QJTG01007AA	CONNECTOR(7P)	1	[SPC]FAJSP
CN6	QJUG00207AA	CONNECTOR(7P)	1	[SPC]MAIN
CN7	QEUGQ8H08BCZ	CONNECTOR(8P)	1	[SPC]MKB2
CN8	QJUG00212AA	CONNECTOR(12P)	1	[SPC]MKB1
CN8	SJPG1290A	CONNECTOR(2P)	1	[SPC]FAJSP
CN9	QJUG01408AA	CONNECTOR(8P)	1	[SPC]MKB1
CN9	SJPG1290A	CONNECTOR(2P)	1	[SPC]FAJSP
CN9	SJPG1JS040A	CONNECTOR(4P)	1	[SPC]MAIN
D1	ERA1502V5	DIODE	1	B0EAKM000061 [SPC]FAJSP 
D1	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D1	MA8030H	DIODE	1	[SPC]MAIN
D1	SEL4214RLC05	LED	1	[SPC]HP
D1-88	MA165TA5	DIODE	88	MA2C16500E [SPC]MKB1
D2	ERA1502V5	DIODE	1	B0EAKM000061 [SPC]FAJSP 
D2	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D2	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D3	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D4	SVDS3V40	DIODE	1	B0EAKM000066 [SPC]FAJSP 
D6,D7	SVDS3V40	DIODE	2	B0EAKM000066 [SPC]FAJSP 
D9	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D9	SVDS3V40	DIODE	1	B0EAKM000066 [SPC]FAJSP 
D10	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D11	MA4180TA	DIODE	1	MAZ418000F [SPC]FAJSP
D12	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D12	MA4180TA	DIODE	1	MAZ418000F [SPC]FAJSP
D13	EK04W	DIODE	1	B0JAME000042 [SPC]FAJSP
D13	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D14	EK04W	DIODE	1	B0JAME000042 [SPC]FAJSP
D14	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D15	MA165TA5	DIODE	1	MA2C16500E [SPC]FAJSP
D15	MA8056	DIODE	1	MAZ8056 [SPC]MAIN
D16	MA165TA5	DIODE	1	MA2C16500E [SPC]FAJSP
D16	MA8047	DIODE	1	[SPC]MAIN
D17	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D17	MA165TA5	DIODE	1	MA2C16500E [SPC]FAJSP,CPR
D18	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D18	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D19	EK04W	DIODE	1	B0JAME000042 [SPC]MAIN
D20	MA2062LF	DIODE	1	MAZ2062000LF [SPC]MAIN 
D22	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D22	MA165TA5	DIODE	1	MA2C16500E [SPC]FAJSP
D23	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D23	MA165TA5	DIODE	1	MA2C16500E [SPC]FAJSP
D24,25	MA111TX	DIODE	2	MA2J11100L [SPC]MAIN
D25	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D26	MA111TX	DIODE	1	MA2J11100L [SPC]MAIN
D26	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D27-29	MA111TX	DIODE	3	MA2J11100L [SPC]MAIN
D30,31	MA165TA5	DIODE	2	MA2C16500E [SPC]FAJSP
D32	MA1039MTR	DIODE	1	[SPC]MAIN
D32	MA165TA5	DIODE	1	MA2C16500E [SPC]FAJSP
D33	EK04W	DIODE	1	B0JAME000042 [SPC]FJASP
D33,34	MA165TA5	DIODE	2	MA2C16500E [SPC]CPR
D41,42	MA165TA5	DIODE	2	MA2C16500E [SPC]CPR
D49	MA165TA5	DIODE	1	MA2C16500E [SPC]CPR
D59,60	MA165TA5	DIODE	2	MA2C16500E [SPC]CPL
D66-69	MA165TA5	DIODE	4	MA2C16500E [SPC]CPL
D73-76	MA165TA5	DIODE	4	MA2C16500E [SPC]CPL
D81	MA165TA5	DIODE	1	MA2C16500E [SPC]CPL
D84	MA165TA5	DIODE	1	MA2C16500E [SPC]CPL
D89	MA165TA5	DIODE	1	MA2C16500E [SPC]CPL
D89-176	MA165TA5	DIODE	88	MA2C16500E [SPC]MKB2
D232-42	LN282RPXVTX2	LED	11	LNJ282RKRX01 [SPC]CPR
D244-46	LN282RPXVTX2	LED	3	LNJ282RKRX01 [SPC]CPR
D256-59	LN282RPXVTX2	LED	4	LNJ282RKRX01 [SPC]CPL
D265-67	LN282RPXVTX2	LED	3	LNJ282RKRX01 [SPC]CPL
D280-83	LN282RPXVTX2	LED	4	LNJ282RKRX01 [SPC]CPL
D288	LN282RPXVTX2	LED	1	LNJ282RKRX01 [SPC]CPL
D291	LN282RPXVTX2	LED	1	LNJ282RKRX01 [SPC]CPL
F1	XBA1C40NB100	FUSE,4A	1	[SPC]FAJSP(P,PC) 
F1	XBA2C16TB0L	FUSE,T1.6A	1	K5Y162B00002 [SPC]FJASP*5 
F2	XBA2C10TB0	FUSE,T1A	1	K5D102BL0005 [SPC]FJASP*5 

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
F3	XBA2C10TB0	FUSE,T1A	1	K5D102BL0005 [SPC]FJASP*5, *6 
F4,5	XBA1C20NB100	FUSE,2A	2	[SPC]FAJSP(P,PC) 
F4,5	XBA2C16TB0L	FUSE,T1.6A	2	K5Y162B00002 [SPC]FJASP*5, *6 
IC1	HD74LS138P	IC	1	C0JACN000001 [SPC]MKB1
IC1	KIA7815PI	IC	1	C0CAALG00016 [SPC]FAJSP 
IC1	M37471M2196S	IC	1	C2BBDB000023 [SPC]CPL
IC1	ST93C46CB1	IC	1	C3EACZ000004 [SPC]MKB1
IC1	TMP95C061BF	IC	1	C2CBAA000002 [SPC]MAIN
IC2	D74HC139GSE2	IC	1	C0JBAN000169 [SPC]MAIN
IC2	HD74LS07P	IC	1	C0JACB000006 [SPC]CPL
IC2	KIA7915PI	IC	1	C0CABLG00006 [SPC]FAJSP 
IC3	HD74LS07P	IC	1	C0JACB000006 [SPC]CPL
IC3	HD74LS138P	IC	1	C0JACN000001 [SPC]MKB2
IC3	M5218AL	IC	1	C0AABB000054 [SPC]FAJSP
IC4	HD74LS138P	IC	1	C0JACN000001 [SPC]MKB2
IC4,C5	M5218AL	IC	2	C0AABB000054 [SPC]FAJSP
IC6	K3E040Z00003	IC	1	[SPC]MAIN
IC6-8	M5218AL	IC	3	C0AABB000054 [SPC]FAJSP
IC8,9	M5256DFP70LL	IC	2	C3BBJC000001 [SPC]MAIN
IC9	M5218AL	IC	1	C0AABB000054 [SPC]FAJSP
IC10	D97315GD201	IC	1	C1ZBZ0001934 [SPC]MAIN
IC10	M5218AL	IC	1	C0AABB000054 [SPC]FAJSP
IC11	LH5P832N-10	IC	1	C3BBFC000151 [SPC]MAIN
IC11	M5218AL	IC	1	C0AABB000054 [SPC]FAJSP
IC12	C3CBND000044	IC	1	[SPC]MAIN
IC12	QCPL-260L	IC	1	[SPC]FAJSP
IC14	TC7W08FTE12L	IC	1	C0JBAA000103 [SPC]MAIN
IC15	TC7W04FTE12L	IC	1	C0JBAB000178 [SPC]MAIN
IC16	D97315GD201	IC	1	C1ZBZ0001934 [SPC]MAIN
IC17	LH5P832N-10	IC	1	C3BBFC000151 [SPC]MAIN
IC18	C3CBND000045	IC	1	[SPC]MAIN
IC20	TC7W08FTE12L	IC	1	C0JBAA000103 [SPC]MAIN
IC21,22	PCM1734EA-E2	IC	2	C0FBBK000008 [SPC]MAIN
IC26	M5218AFPE3	IC	1	C0ABBB000163 [SPC]MAIN
JK1	QJJG010AA	JACK,HEADPHONE 1	1	[SPC]HP
JK1	QJSG007AA	JACK,PEDAL IN	1	[SPC]FAJSP
JK2	QJJG010AA	JACK,HEADPHONE 2	1	[SPC]HP
JK2	QJSG016AA	JACK,MIDI IN	1	K1CB103B0007 [SPC]FAJSP
JK3	QJSG016AA	JACK,MIDI OUT	1	K1CB103B0007 [SPC]FAJSP
JK5	QJJG003AA	JACK,AUX L	1	K2HB102J0037 [SPC]FAJSP
JK6	QJJG003AA	JACK,AUX R/R+L	1	K2HB102J0037 [SPC]FAJSP
JK7	QJJG003AA	JACK,LINE OUT L	1	K2HB102J0037 [SPC]FAJSP
JK8	QJJG003AA	JACK,LINE OUT R/R+L	1	K2HB102J0037 [SPC]FAJSP
JK9	SJVD0203B	JACK,AC IN	1	[SPC]FAJSP 
JR1-R3	ERDS2T0A	1/4W 0	3	[SPC]PKB



Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L1	QLQGT1B100MA	10UH	1	G0A100G00005 [SPC]MAIN
L1	QLQGT2T100LA	10UH~2	1	[SPC]FAJSP 
L1	QLQGT3T131LA	130UH~3	1	[SPC]HP
L2	QLBG005A	COIL	1	G0ZZ00001936 [SPC]MAIN 
L4	QLQGT1B101KA	100UH	1	G0C101K00030 [SPC]MAIN
L6,L7	QLBG005A	COIL	2	G0ZZ00001936 [SPC]MAIN 
L34,35	BK2125LM252T	2.5K	2	J0JBC0000023 [SPC]MAIN
LC92	BK2125LM252T	2.5K	1	J0JBC0000023 [SPC]MAIN
LED1	T512SRDBS119	LED	1	[SPC]CPR
P1	QPGG0500AA	PACKING CASE	1	[SPC](K)
P1	QPGG0500AB	PACKING CASE	1	[SPC](M)
PCB1	SXPG218221	PKB P.C.B.	1	[SPC](RTL)
PCB2	SXPG2244291A	FJASP P.C.B.	1	[SPC](RTL)(P,PC)
PCB2	SXPG2244301A	FJASP P.C.B.	1	[SPC](RTL)*5
PCB2	SXPG2244281A	FJASP P.C.B.	1	[SPC](RTL)*6
PCB3	SXPG231111A	MKB1 P.C.B.	1	[SPC](RTL)
PCB4	SXPG231111B	MKB2 P.C.B.	1	[SPC](RTL)
PCB5	SXPG224322	HP P.C.B.	1	[SPC](RTL)
PCB7	SXPG235041	MAIN P.C.B.	1	[SPC](RTL)
PCB8	SXPG227861A	CPL P.C.B.	1	[SPC](RTL)
PCB9	SXPG227861B	CPR P.C.B.	1	[SPC](RTL)
Q1	2SB709AR	TRANSISTOR	1	2SB0709AR [SPC]MAIN
Q1	2SC1815TPE2	TRANSISTOR	1	B1AACF000023 [SPC]FAJSP
Q2	2SA830STPB	TRANSISTOR	1	[SPC]CPL
Q2	2SB709AR	TRANSISTOR	1	2SB0709AR [SPC]MAIN
Q2	2SC1815TPE2	TRANSISTOR	1	B1AACF000023 [SPC]FAJSP
Q3	2SA1015TPE2	TRANSISTOR	1	B1ACCF000016 [SPC]FAJSP
Q3	2SA830STPB	TRANSISTOR	1	[SPC]CPL
Q3	2SD601AQ	TRANSISTOR	1	2SD0601AQ [SPC]MAIN
Q4	2SA830STPB	TRANSISTOR	1	[SPC]CPL
Q4	2SC1815TPE2	TRANSISTOR	1	B1AACF000023 [SPC]FAJSP
Q5	2SA1015TPE2	TRANSISTOR	1	B1ACCF000016 [SPC]FAJSP
Q5	2SA830STPB	TRANSISTOR	1	[SPC]CPL
Q5	2SD601AQ	TRANSISTOR	1	2SD0601AQ [SPC]MAIN
Q6	2SA1015TPE2	TRANSISTOR	1	B1ACCF000016 [SPC]FAJSP
Q6	2SA830STPB	TRANSISTOR	1	[SPC]CPL
Q6	2SD601AQ	TRANSISTOR	1	2SD0601AQ [SPC]MAIN
Q7	2SB621A-R	TRANSISTOR	1	2SB0621AH [SPC]MAIN
Q7	2SD592ARS	TRANSISTOR	1	[SPC]FAJSP
Q8	2SB621A-R	TRANSISTOR	1	2SB0621AH [SPC]FAJSP
Q8,Q9	2SC1815TPE2	TRANSISTOR	2	B1AACF000023 [SPC]MAIN
Q9	2SD592ARS	TRANSISTOR	1	[SPC]FAJSP
Q10	2SB621A-R	TRANSISTOR	1	2SB0621AH [SPC]FAJSP
Q11	2SC1815TPE2	TRANSISTOR	1	B1AACF000023 [SPC]FAJSP(P,PC)
Q11	SIPG2244281A	TRANSISTOR	1	[SPC]FAJSP*6
Q12	2SA1015TPE2	TRANSISTOR	1	B1ACCF000016 [SPC]FAJSP
Q13	2SC1815TPE2	TRANSISTOR	1	B1AACF000023 [SPC]FAJSP

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Q14	2SA1015TPE2	TRANSISTOR	1	B1ACCF000016 [SPC]FAJSP
Q15	2SA1725PY	TRANSISTOR	1	B1BCEJ000004 [SPC]FAJSP
Q16	2SC4511PY	TRANSISTOR	1	B1BAEJ000008 [SPC]FAJSP
Q17	2SA1725PY	TRANSISTOR	1	B1BCEJ000004 [SPC]FAJSP
Q18	2SC4511PY	TRANSISTOR	1	B1BAEJ000008 [SPC]FAJSP
Q20	2SA1015Y	TRANSISTOR	1	B1ACCF000006 [SPC]FAJSP
R1	ERDS2T0T	1/4W 0	1	[SPC]MAIN
R1	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R1	ERDS2TJ472	1/4W 4.7K	1	[SPC]CPL
R1	ERG1SJ470	47	1	[SPC]HP 
R2	ERDS2T0	1/4W 0	1	[SPC]CPL
R2	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R2	ERG1SJ470	47	1	[SPC]HP 
R2	ERJ6GEYJ472V	1/10W 4.7K	1	[SPC]MAIN
R3	ERD2FCVJ6R8	6.8	1	[SPC]FAJSP 
R3	ERDS2T0	1/4W 0	1	[SPC]CPL
R3	ERG1SJ470	47	1	[SPC]HP 
R3	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R4	ERD2FCVJ6R8	6.8	1	[SPC]FAJSP 
R4	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R4	ERG1SJ470	47	1	[SPC]HP 
R4	ERJ6GEYJ222V	1/10W 2.2K	1	[SPC]MAIN
R5	ERD2FCVJ6R8	6.8	1	[SPC]FAJSP 
R5	ERDS2TJ471	1/4W 470	1	[SPC]CPL
R5	ERJ6GEYJ102V	1/10W 1K	1	[SPC]MAIN
R6	ERDS2FJ104	1/4W 100K	1	[SPC]FAJSP
R6	ERDS2FJ221	1/4W 220	1	[SPC]CPL
R6	ERJ6GEYJ102V	1/10W 1K	1	[SPC]MAIN
R7	ERDS2FJ221	1/4W 220	1	[SPC]CPL
R7	ERDS2FJ473	1/4W 47K	1	[SPC]FAJSP
R7	ERJ6GEYJ104V	1/10W 100K	1	[SPC]MAIN
R8	ERDS2FJ473	1/4W 47K	1	[SPC]FAJSP
R8	ERDS2TJ471	1/4W 470	1	[SPC]CPL
R8	ERDS2TJ472	1/4W 4.7K	1	[SPC]PKB
R8	ERJ6GEYJ104V	1/10W 100K	1	[SPC]MAIN
R9	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R9	ERDS2TJ472	1/4W 4.7K	1	[SPC]PKB
R9	ERJ6GEYJ101V	1/10W 100	1	[SPC]MAIN
R10	ERDS2FJ332	1/4W 3.3K	1	[SPC]FAJSP
R10	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R10	ERDS2TJ472	1/4W 4.7K	1	[SPC]PKB
R10	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R11	ERDS2FJ104	1/4W 100K	1	[SPC]CPL
R11	ERDS2TJ472	1/4W 4.7K	1	[SPC]FAJSP
R11	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R12	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R12	ERJ6GEYJ154V	1/10W 150K	1	[SPC]MAIN
R13	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R13	ERJ6GEYJ154V	1/10W 150K	1	[SPC]MAIN
R14	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R14	ERJ6GEYJ154V	1/10W 150K	1	[SPC]MAIN

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R15	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R15	ERDS2TJ472	1/4W 4.7K	1	[SPC]FAJSP
R15	ERJ6GEYJ152V	1/10W 1.5K	1	[SPC]MAIN
R16	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R16	ERJ6GEYJ152V	1/10W 1.5K	1	[SPC]MAIN
R17	ERDS2FJ332	1/4W 3.3K	1	[SPC]FAJSP
R17	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R17	ERJ6GEYJ152V	1/10W 1.5K	1	[SPC]MAIN
R18	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R18	ERDS2TJ334	1/4W 330K	1	[SPC]FAJSP
R18	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R19	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R19	ERDS2TJ274	1/4W 270K	1	[SPC]FAJSP
R20	ERDS2FJ222	1/4W 2.2K	1	[SPC]FAJSP
R21	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R21	ERDS2TJ220	1/4W 22	1	[SPC]FAJSP
R22	ERD25FVJ4R7	1/4W 4.7	1	[SPC]FAJSP
R22	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R23	ERD2FCG220	22	1	[SPC]FAJSP ⚠
R23	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R23	ERJ6GEY0R00V	1/10W 0	1	[SPC]MAIN
R24	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R24	ERDS2TJ334	1/4W 330K	1	[SPC]FAJSP
R25	ERDS2TJ103	1/4W 10K	1	[SPC]CPL
R25	ERDS2TJ274	1/4W 270K	1	[SPC]FAJSP
R26	ERDS2FJ222	1/4W 2.2K	1	[SPC]FAJSP
R26,27	ERDS2TJ101	1/4W 100	2	[SPC]CPL
R27	ERDS2TJ220	1/4W 22	1	[SPC]FAJSP
R27	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R28	ERD25FVJ4R7	1/4W 4.7	1	[SPC]FAJSP
R28	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R28	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R29	ERD2FCG220	22	1	[SPC]FAJSP ⚠
R29	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R29	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R30	ERDS2FJ332	1/4W 3.3K	1	[SPC]FAJSP
R30	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R30	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R31	ERDS2FJ223	1/4W 22K	1	[SPC]FAJSP
R31	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R32	ERDS2FJ223	1/4W 22K	1	[SPC]FAJSP
R32	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R32	ERJ6GEYJ101V	1/10W 100	1	[SPC]MAIN
R33	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R33	ERDS2TJ563	1/4W 56K	1	[SPC]FAJSP
R34	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R34	ERDS2TJ682T	1/4W 6.8K	1	[SPC]FAJSP
R35	ERDS2FJ332	1/4W 3.3K	1	[SPC]FAJSP
R35	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R36	ERDS2FJ223	1/4W 22K	1	[SPC]FAJSP
R36	ERDS2TJ101	1/4W 100	1	[SPC]CPL
R37	ERDS2FJ223	1/4W 22K	1	[SPC]FAJSP
R37	ERDS2TJ101	1/4W 100	1	[SPC]CPL

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R38	ERDS2TJ563	1/4W 56K	1	[SPC]FAJSP
R39	ERDS2TJ682T	1/4W 6.8K	1	[SPC]FAJSP
R39	ERJ6GEYJ222V	1/10W 2.2K	1	[SPC]MAIN
R40	ERDS2TJ153	1/4W 15K	1	[SPC]FAJSP
R40	ERJ6GEYJ222V	1/10W 2.2K	1	[SPC]MAIN
R41	ERDS2TJ102	1/4W 1K	1	[SPC]FAJSP
R41	ERJ6GEYJ222V	1/10W 2.2K	1	[SPC]MAIN
R42	ERDS2TJ184	1/4W 180K	1	[SPC]FAJSP
R42	ERJ6GEYJ222V	1/10W 2.2K	1	[SPC]MAIN
R43	ERDS2TJ152	1/4W 1.5K	1	[SPC]FAJSP
R43	ERJ6GEYJ101V	1/10W 100	1	[SPC]MAIN
R44	ERDS2TJ334	1/4W 330K	1	[SPC]FAJSP
R44	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R45	ERDS2FJ222	1/4W 2.2K	1	[SPC]FAJSP
R45	ERJ6GEYJ332V	1/10W 3.3K	1	[SPC]MAIN
R46	ERDS2TJ154	1/4W 150K	1	[SPC]FAJSP
R47	ERDS2FJ271	1/4W 270	1	[SPC]FAJSP
R47	ERDS2TJ272	1/4W 2.7K	1	[SPC]FAJSP
R47	ERJ6GEYJ102V	1/10W 1K	1	[SPC]MAIN
R48	ERDS2TJ274	1/4W 270K	1	[SPC]FAJSP
R48	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R49	ERDS2TJ102	1/4W 1K	1	[SPC]FAJSP
R49	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R50	ERDS2TJ394	1/4W 39K	1	[SPC]FAJSP
R50	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R51	ERDS2TJ332	1/4W 3.3K	1	[SPC]FAJSP
R51	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R52	ERDS2FJ274	1/4W 270K	1	[SPC]FAJSP
R52	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R53	ERDS2TJ103	1/4W 10K	1	[SPC]FAJSP
R53	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R54	ERDS2TJ152	1/4W 1.5K	1	[SPC]FAJSP
R54	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R55	ERDS2TJ334	1/4W 330K	1	[SPC]FAJSP
R55	ERJ6GEYJ681V	1/10W 680	1	[SPC]MAIN
R56	ERDS2TJ102	1/4W 1K	1	[SPC]FAJSP
R56	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R57	ERDS2TJ184	1/4W 180K	1	[SPC]FAJSP
R57	ERJ6GEYJ222V	1/10W 2.2K	1	[SPC]MAIN
R58	ERDS2FJ271	1/4W 270	1	[SPC]FAJSP
R58	ERJ6GEYJ102V	1/10W 1K	1	[SPC]MAIN
R59	ERDS2TJ274	1/4W 270K	1	[SPC]FAJSP
R59	ERJ6GEYJ472V	1/10W 4.7K	1	[SPC]MAIN
R60	ERDS2FJ222	1/4W 2.2K	1	[SPC]FAJSP
R60	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R61	ERDS2TJ154	1/4W 150K	1	[SPC]FAJSP
R61	ERJ6GEYJ681V	1/10W 680	1	[SPC]MAIN
R62	ERDS2TJ102	1/4W 1K	1	[SPC]FAJSP
R62	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R63	ERDS2TJ394	1/4W 39K	1	[SPC]FAJSP
R63	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R64	ERDS2TJ332	1/4W 3.3K	1	[SPC]FAJSP
R64	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R65	ERDS2FJ274	1/4W 270K	1	[SPC]FAJSP

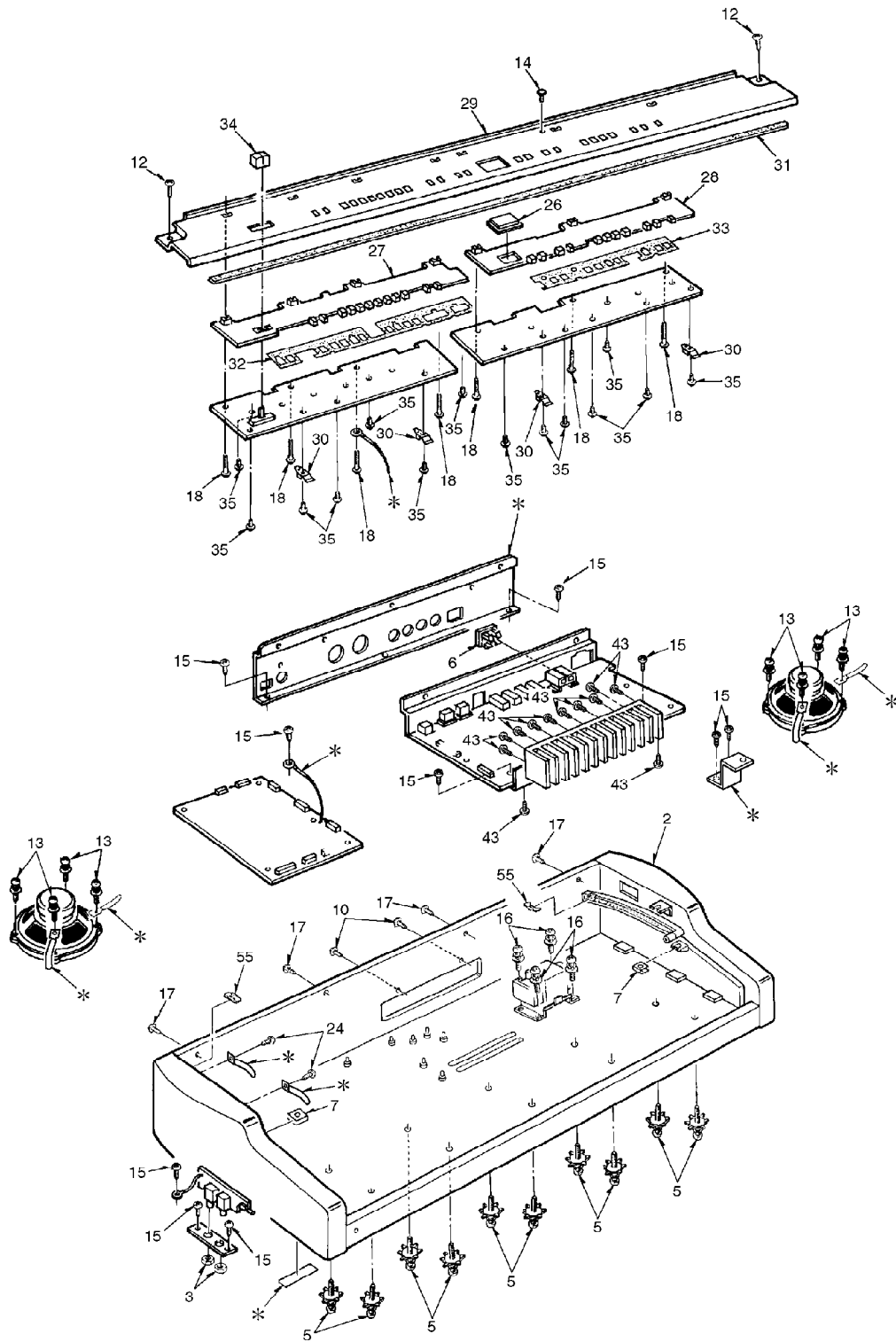
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R65	ERJ6GEYJ105	1/10W 1M	1	ERJ6GEYJ105V [SPC]MAIN
R66	ERDS2FJ104	1/4W 100K	1	[SPC]FAJSP
R66	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R67	ERDS2TJ564	1/4W 560K	1	[SPC]FAJSP
R68	ERDS2TJ102	1/4W 1K	1	[SPC]FAJSP
R69	ERDS2TJ272	1/4W 2.7K	1	[SPC]FAJSP
R70	ER0S2TKF1001	1/4W 1K	1	EROS2TKF1001 [SPC]FAJSP
R71	ER0S2TKF1002	1/4W 10K	1	EROS2TKF1002 [SPC]FAJSP
R72	ER0S2TKF1001	1/4W 1K	1	EROS2TKF1001 [SPC]FAJSP
R73	ERDS2TJ272	1/4W 2.7K	1	[SPC]FAJSP
R74	ERD2FCVG101	100	1	[SPC]FAJSP 
R75	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R76	ERDS2FJ331	1/4W 330	1	[SPC]FAJSP
R76	ERJ6GEYJ102V	1/10W 1K	1	[SPC]MAIN
R77,78	ERDS2FJ331	1/4W 330	2	[SPC]FAJSP
R79	ERD2FCVG101	100	1	[SPC]FAJSP 
R80	ERD2FCJ4R7	4.7	1	[SPC]FAJSP 
R82	ERDS2FJ104	1/4W 100K	1	[SPC]FAJSP
R83	ERDS2TJ564	1/4W 560K	1	[SPC]FAJSP
R84	ERDS2TJ102	1/4W 1K	1	[SPC]FAJSP
R85	ERDS2TJ272	1/4W 2.7K	1	[SPC]FAJSP
R86	ER0S2TKF1001	1/4W 1K	1	EROS2TKF1001 [SPC]FAJSP
R87	ER0S2TKF1002	1/4W 10K	1	EROS2TKF1002 [SPC]FAJSP
R87	ERJ6GEYJ102V	1/10W 1K	1	[SPC]MAIN
R88	ER0S2TKF1001	1/4W 1K	1	EROS2TKF1001 [SPC]FAJSP
R89	ERDS2TJ272	1/4W 2.7K	1	[SPC]FAJSP
R90	ERD2FCVG101	100	1	[SPC]FAJSP 
R91,92	ERDS2FJ331	1/4W 330	2	[SPC]FAJSP
R92	ERJ6GEYJ103V	1/10W 10K	1	[SPC]MAIN
R93	ERDS2FJ331	1/4W 330	1	[SPC]FAJSP
R93	ERJ6GEYJ101V	1/10W 100	1	[SPC]MAIN
R94	ERD2FCVG101	100	1	[SPC]FAJSP 
R94	ERJ6GEY0R00V	1/10W 0	1	[SPC]MAIN
R95	ERD2FCJ4R7	4.7	1	[SPC]FAJSP 
R95	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R96,97	ERJ6GEYJ331V	1/10W 330	2	[SPC]MAIN
R98	ERJ6GEYJ473V	1/10W 47K	1	[SPC]MAIN
R99,00	ERDS2FJ681	1/4W 680	2	[SPC]FAJSP
R102	ERDS2TJ471	1/4W 470	1	[SPC]FAJSP
R102,03	ERJ6GEYJ123	1/10W 12K	2	[SPC]MAIN
R104	ERDS2TJ471	1/4W 470	1	[SPC]FAJSP
R104,05	ERJ6GEYJ123	1/10W 12K	2	[SPC]MAIN
R106	ERDS2TJ471	1/4W 470	1	[SPC]FAJSP
R106,07	ERJ6GEYJ104V	1/10W 100K	2	[SPC]MAIN
R110	ERDS2TJ151	1/4W 150	1	[SPC]FAJSP
R111	ERDS2FJ330	1/4W 33	1	[SPC]FAJSP
R113	ERDS2FJ221	1/4W 220	1	[SPC]FAJSP
R113	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R114	ERDS2FJ331	1/4W 330	1	[SPC]FAJSP
R114	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R115	ERQ2CJP4R7S	4.7	1	[SPC]FAJSP 
R116	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN

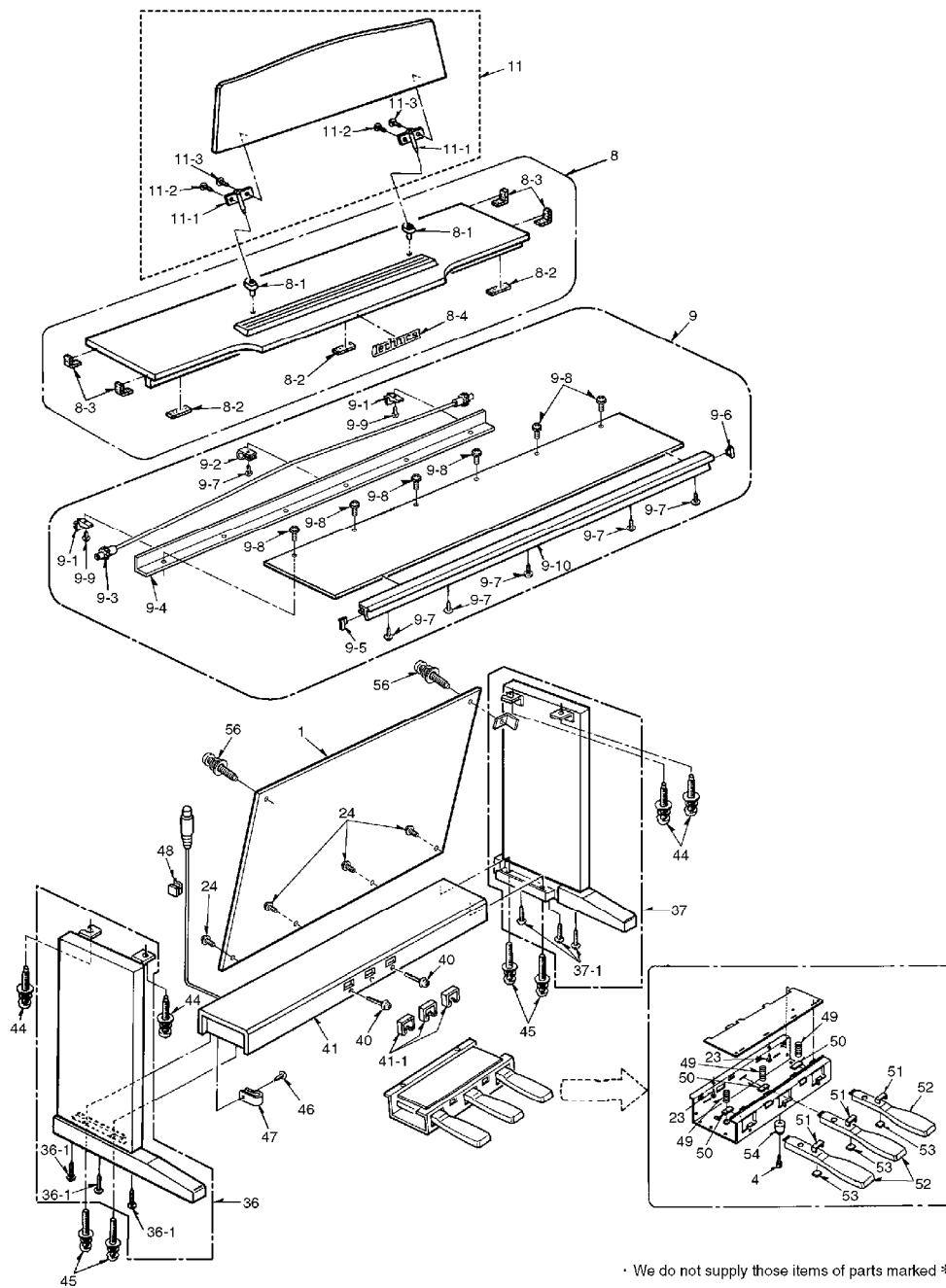


Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R116	ERQ14AJ2R0	2	1	[SPC]FAJSP 
R117	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R118	ERDS2FJ221	1/4W 220	1	[SPC]FAJSP
R118	ERJ6GEYJ471V	1/10W 470	1	[SPC]MAIN
R200,01	ERJ6GEY0R00V	1/10W 0	2	[SPC]MAIN
R202	ERJ6GEYJ221V	1/10W 220	1	[SPC]MAIN
R204	ERJ6GEY0R00V	1/10W 0	1	[SPC]MAIN
R210,11	ERJ6GEY0R00V	1/10W 0	2	[SPC]MAIN
S1	QSPG1010AA	SW,POWER	1	[SPC]
S1-S3	QSTGT001AA	LEVER SWITCH	3	K0D112A00015 [SPC]PKB
SP1,2	QASG14P02A	SPEAKER,14CM 6 	2	[SPC]
SW1,W2	EVQ21507K	SW,TACT	2	[SPC]CPR
SW9,10	EVQ21507K	SW,TACT	2	[SPC]CPR
SW17,18	EVQ21507K	SW,TACT	2	[SPC]CPR
SW25,26	EVQ21507K	SW,TACT	2	[SPC]CPR
SW33,34	EVQ21507K	SW,TACT	2	[SPC]CPR
SW41,42	EVQ21507K	SW,TACT	2	[SPC]CPR
SW49	EVQ21507K	SW,TACT	1	[SPC]CPR
SW59,60	EVQ21507K	SW,TACT	2	[SPC]CPL
SW66-68	EVQ21507K	SW,TACT	3	[SPC]CPL
SW73-76	EVQ21507K	SW,TACT	4	[SPC]CPL
SW81	EVQ21507K	SW,TACT	1	[SPC]CPL
SW84	EVQ21507K	SW,TACT	1	[SPC]CPL
SW89	EVQ21507K	SW,TACT	1	[SPC]CPL
T1	QTPG1M022A	POWER TRANSFORMER	1	G4C6AFD00002 [SPC](P,PC) 
T1	QTPG1M025A	POWER TRANSFORMER	1	G4C6AFK00001 [SPC]*6 
T1	QTPG1M025A	POWER TRANSFORMER	1	G4C6AFK00001 [SPC]*5 
VR2	QRVG25P01B53	VR,MAIN VOLUME	1	D2B5C53B0001 [SPC]CPL
W1	QEXGSS06075A	WIRE WITH CONNECTOR	1	[SPC]
W2	QEXGVH02040B	WIRE WITH CONNECTOR	1	[SPC]
W3	QEXGVH02055C	WIRE WITH CONNECTOR	1	[SPC]
W4	QEXGSS05021A	WIRE WITH CONNECTOR	1	[SPC]
W5	QEXGSS06028A	WIRE WITH CONNECTOR	1	[SPC]
W6	QEXGSS16018A	WIRE WITH CONNECTOR	1	[SPC]
W7	QEXGVH03090B	WIRE WITH CONNECTOR	1	[SPC]
X1	EF0MC4004T5	4MHZ CERAMIC OSC.	1	EF0MC4004T5 [SPC]CPL
X1	QSXG2F2400A	24MHZ CERAMIC OSC.	1	H2A240500003 [SPC]MAIN
X4	QSXG1A1128A	11.28MHZ CERAMIC OSC.	1	H0H112500002 [SPC]MAIN
Z1-Z9	EXBV8V101J	100  ~4	9	[SPC]MAIN
Z12-31	EXBV8V471J	470  ~4	20	EXBV8V471JV [SPC]MAIN
Z32,33	EXBV8V102J	1K  ~4	2	[SPC]MAIN
Z34-36	EXBS8V102J	1K  ~4	3	[SPC]MAIN
Z37,38	EXBV8V472J	4.7K  ~4	2	D1H847240002 [SPC]MAIN

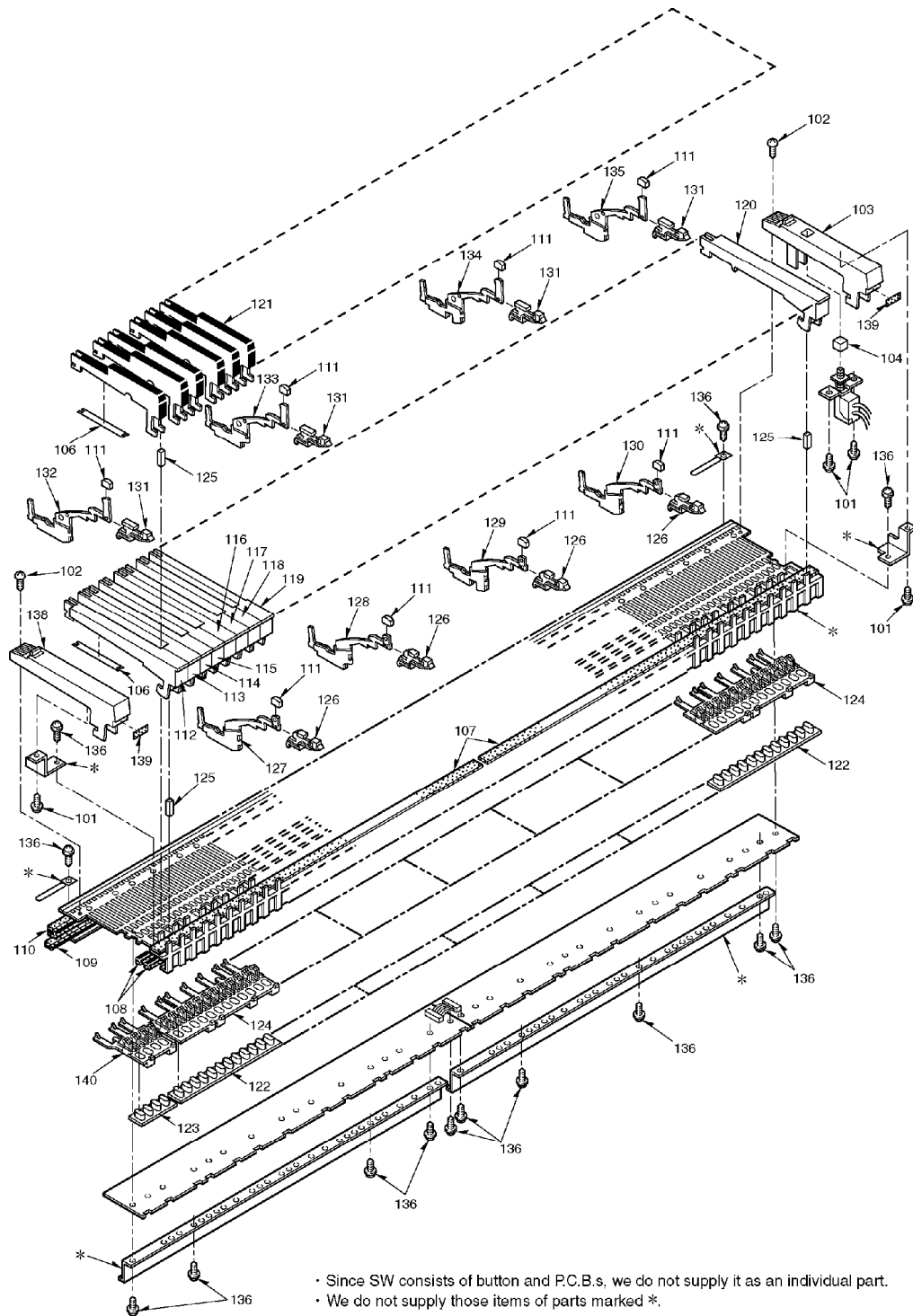
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
Z40	EXBV8V223J	2.2K Ω ~4	1	D1H82234A007 [SPC]MAIN

20. Cabinet Parts Location

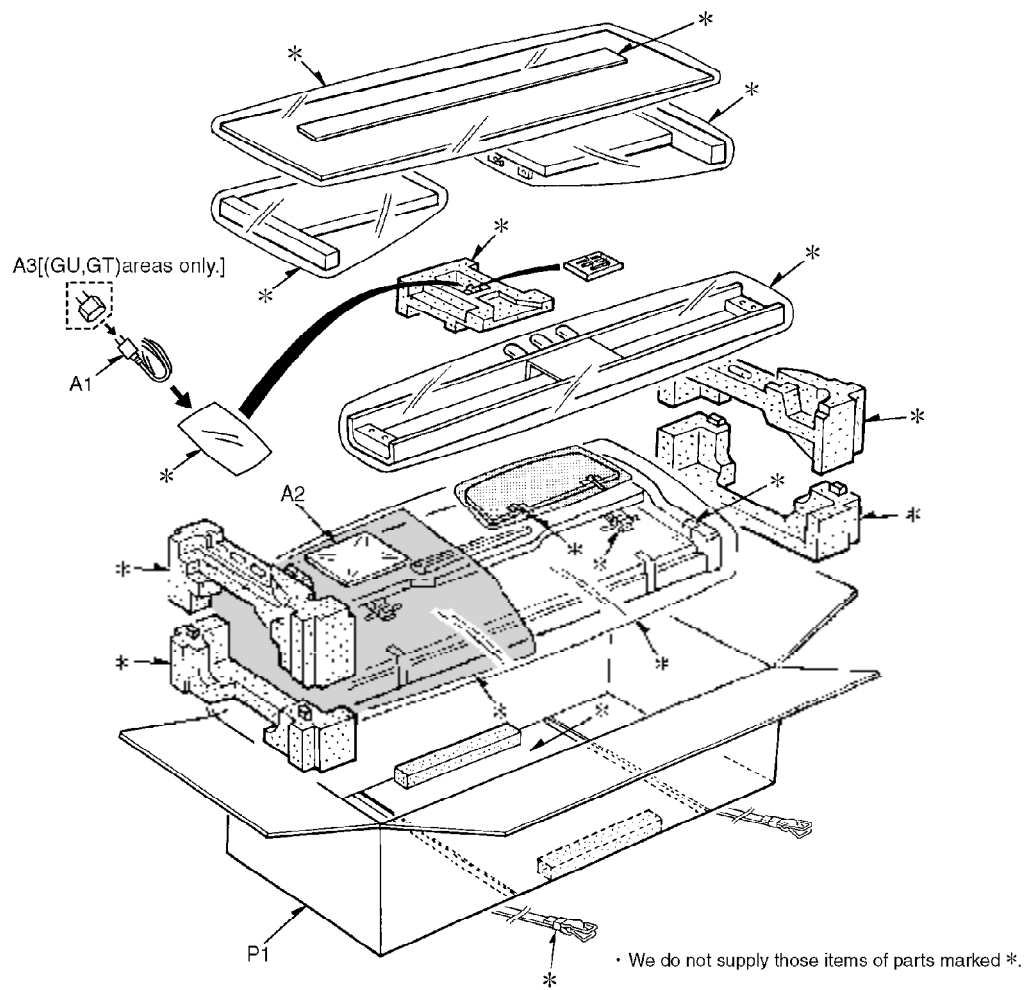




21. Manual Keyboard Parts Location

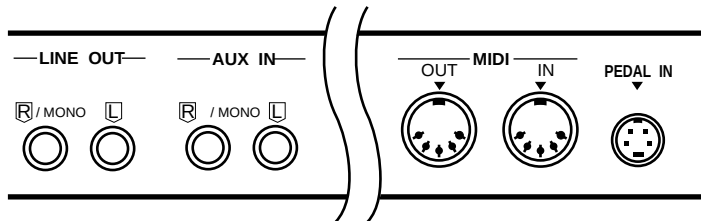


22. Packaging



H010400000 KA/HH

(On the back of piano)



PEDAL IN

Connect the cord from the included stand to this terminal.

AUX IN (input level 0.5 Vrms, 6 kW)

Other instruments such as a rhythm machine or sound module can be connected to the piano so that the sound is output from the piano. To receive monaural sound, connect instruments to the **R/MONO** terminal.

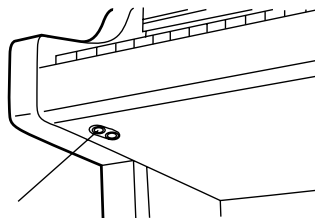
LINE OUT (output level 1.5 Vrms, 600 W)

By plugging into a high-power amplifier, the sound can be reproduced at high volume. (Use the **R/MONO** terminal when outputting monaural sound. However, there are some cases where the sound quality may deteriorate depending on the sound.)

HEADPHONES (phones) × 2

(Beneath the keyboard, on the left side)

For silent practice headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.



phones

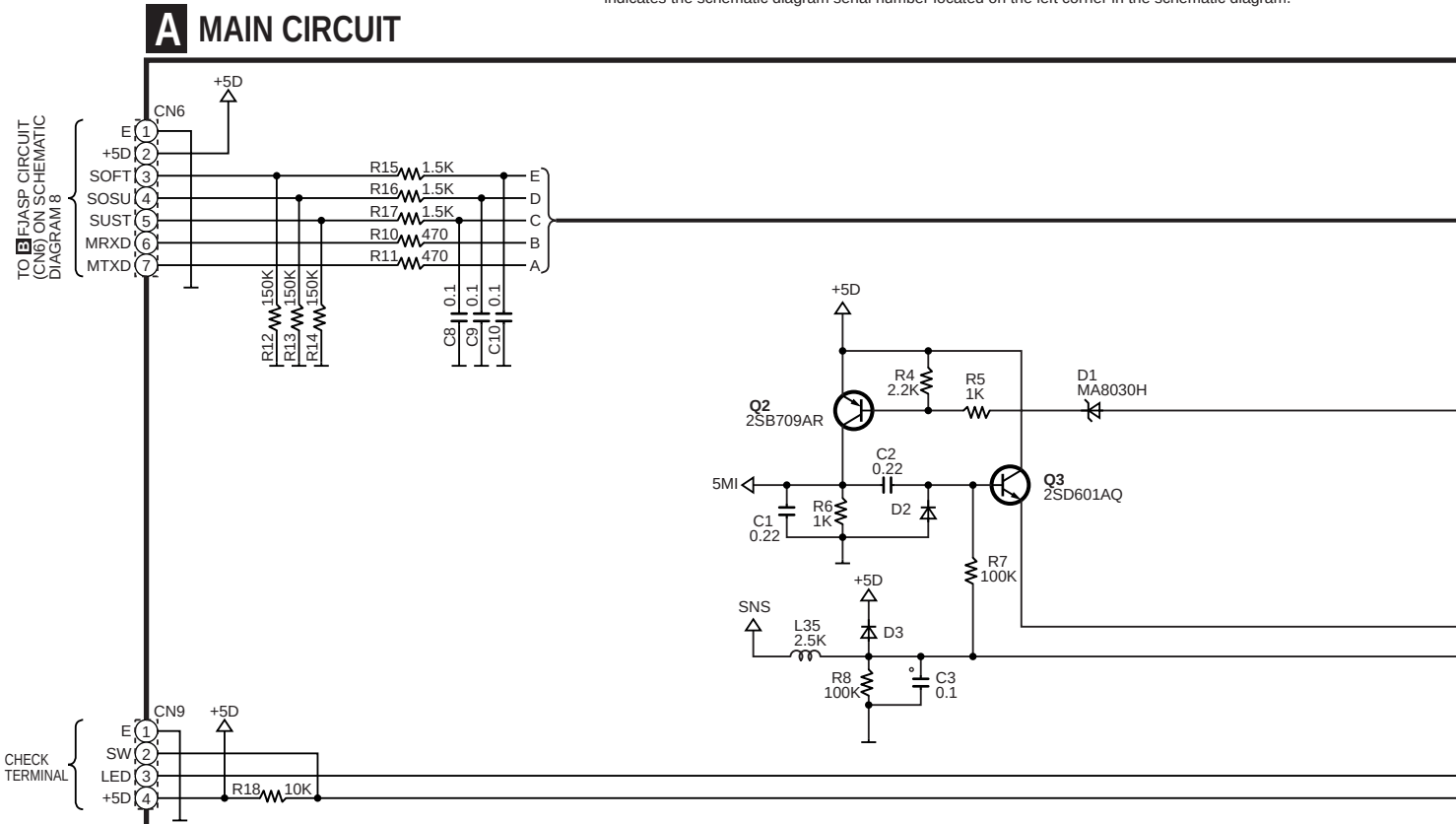
Phenomenon	Remedy
No sound is produced when the keyboard is played.	• No sound is produced if the MAIN VOLUME is set to MIN. Use the sliding control to set the volume to an appropriate level. • If the MIDI LOCAL CONTROL is set to off, set it to on.
Nothing is shown on the display.	• The metronome, SEQUENCER tempo, etc. are indicated on the display. During normal performance, however, the display is off.
Data cannot be exchanged through MIDI terminals.	• Match the channels on the transmitting side and the receiving side.
The sound quavers or is distorted.	• When both the MIDI IN and OUT terminals are connected to a computer, depending on the computer software the received data may be sent back to the instrument just as it is. Because of this the sound generated from the keys and the sound generated from the returned data are both produced, causing undesirable effects, such as the sounds canceling each other out, for example. In this case, either change the software settings to prevent received data from being returned, or set the MIDI LOCAL CONTROL to off.

Digital piano

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1–16 1–16	1–16 1–16	memorized
Mode	Default Messages Altered	3 × —	1, 3 × —	memorized
Note Number	True voice	*21–108 —	0–127 *0–127	
Velocity	Note ON Note OFF	○ × (9nH: V=0)	○ ×	
After Touch	Key's Ch's	× ×	× ×	
Pitch Bend		×	○	
Control Change	01 06,38 07 10 11 64 66 67 91 93 98, 99 100,101	× × × × × × ○× ○× ○× × ○× ×	**○ **○ **○ **○ **○ ○× ○× ○× **○ ○× **○ **○	modulation data entry volume (part) pan part expression sustain pedal sostenuto pedal soft pedal reverb depth digital effect NRPN LSB, MSB RPN LSB, MSB
Prog Change	True #	○× 0–127	○× 0– 7 (PX662) 0–17 (PX664)	
System Exclusive		×	×	
System Common	Song Pos Song Sel Tune	× × ×	× × ×	
System Real Time	Clock Commands	× ×	× ×	
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	× × ○ ×	○ ○ ○ ×	
Notes		○× Whether or not the data for each of these items is transmitted or received can be set. * Changes depending on the TRANPOSE setting. ** Effective only in the MULTI TIMBRE mode.		

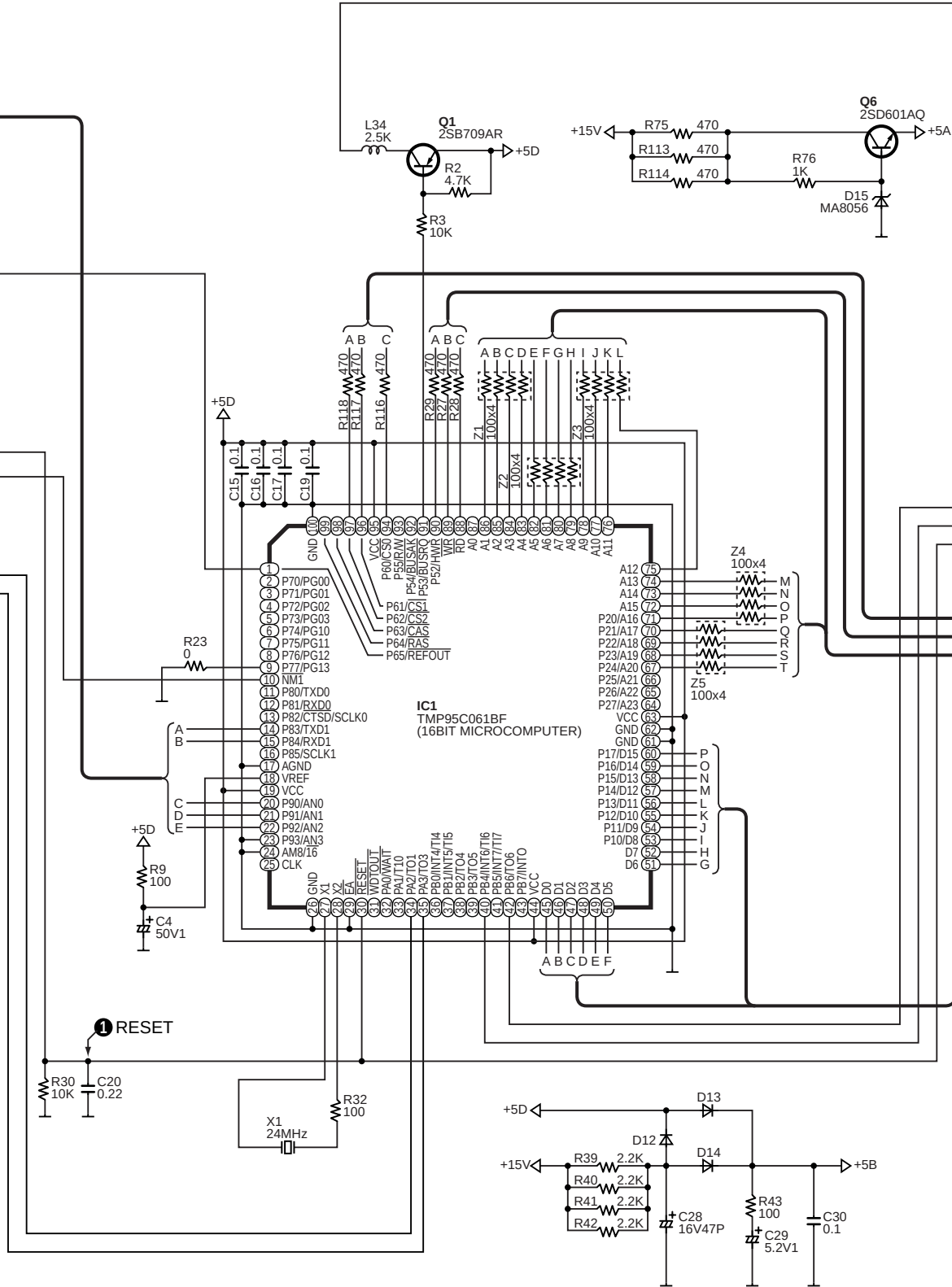
SCHEMATIC DIAGRAM-1

NOTE:
The number which noted at the connectors on the schematic diagram as
"SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2"
indicates the schematic diagram serial number located on the left corner in the schematic diagram.

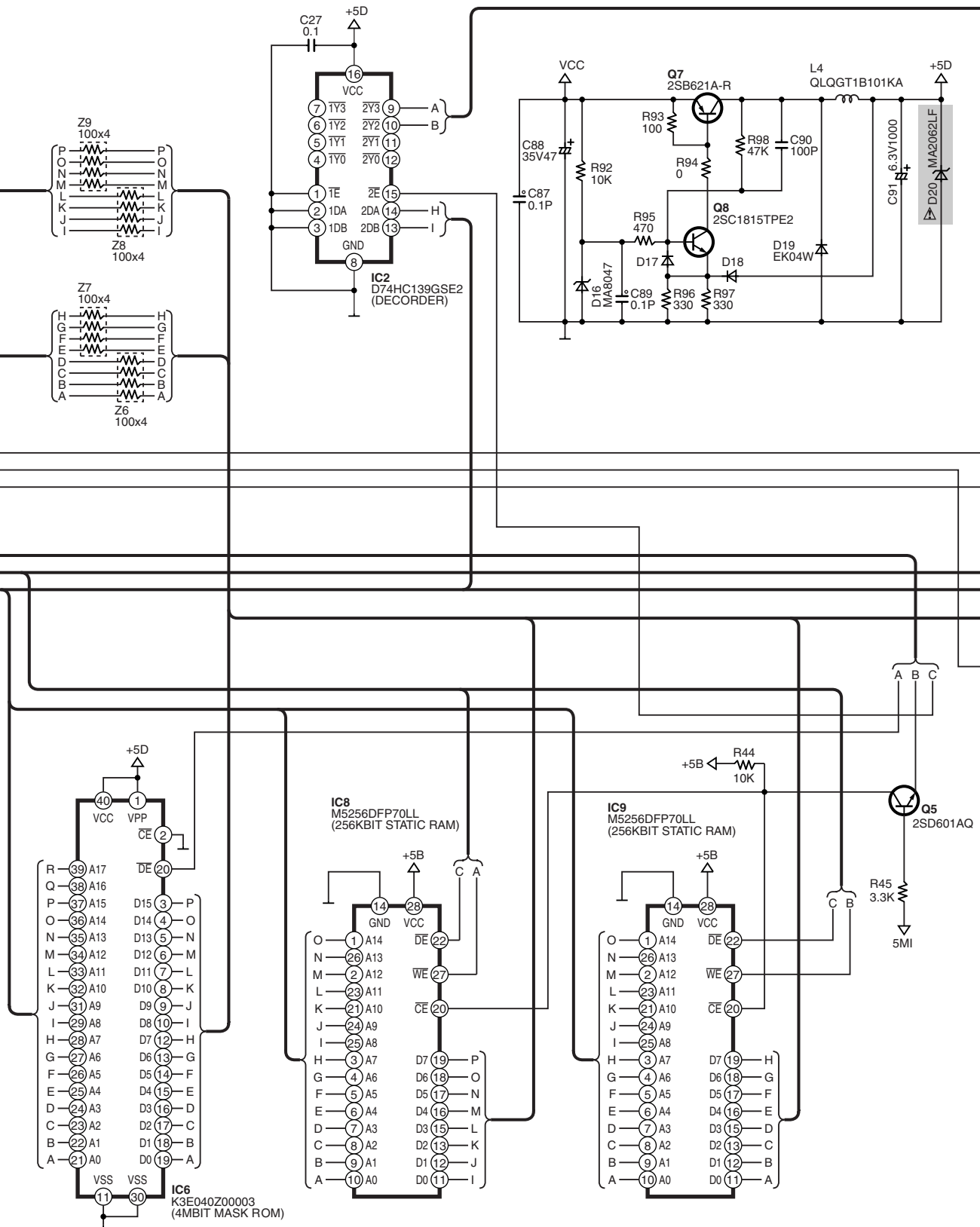


UNLESS OTHERWISE SPECIFIED:
DIODES ARE MA111TX.

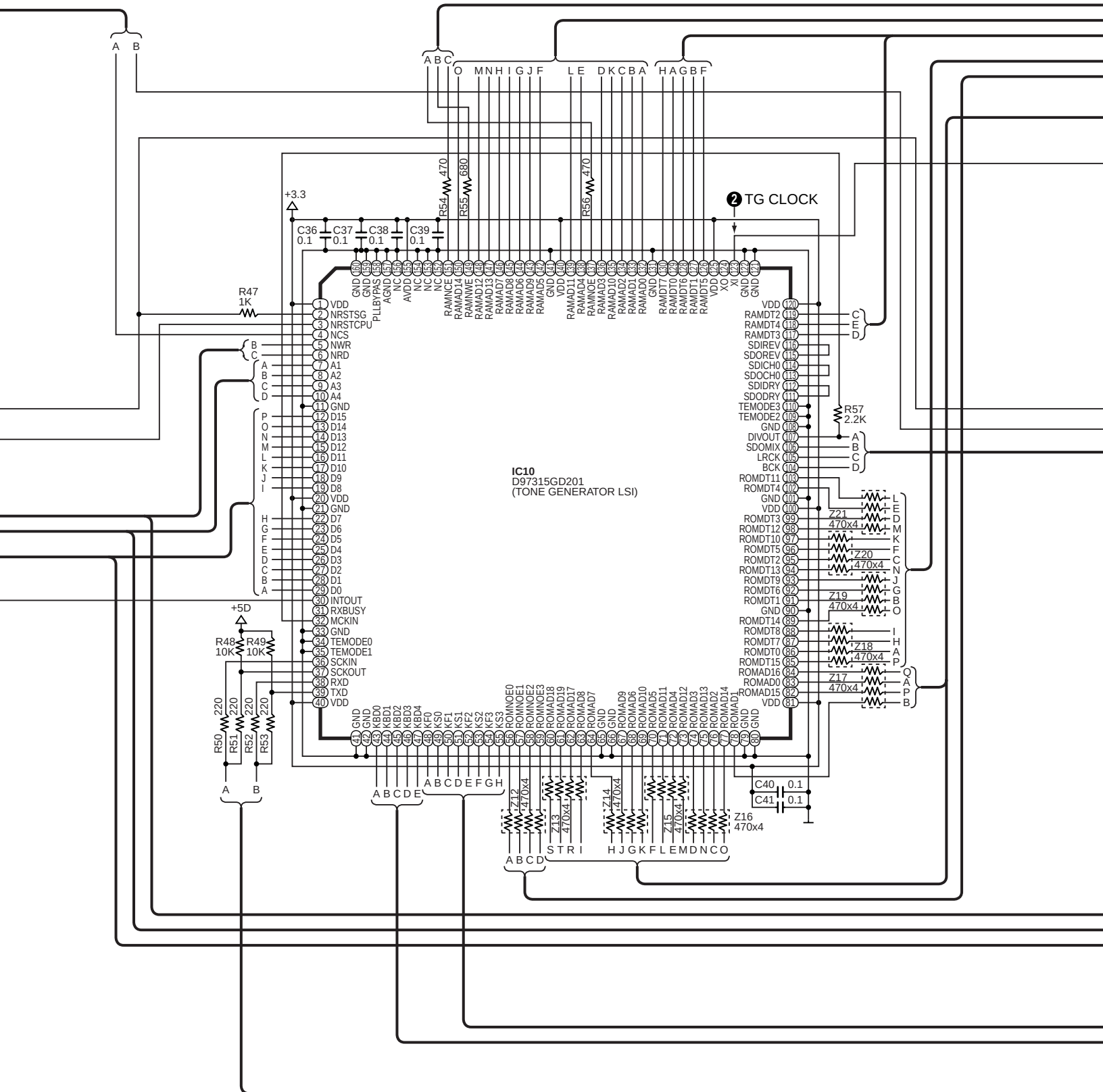
SCHEMATIC DIAGRAM-2



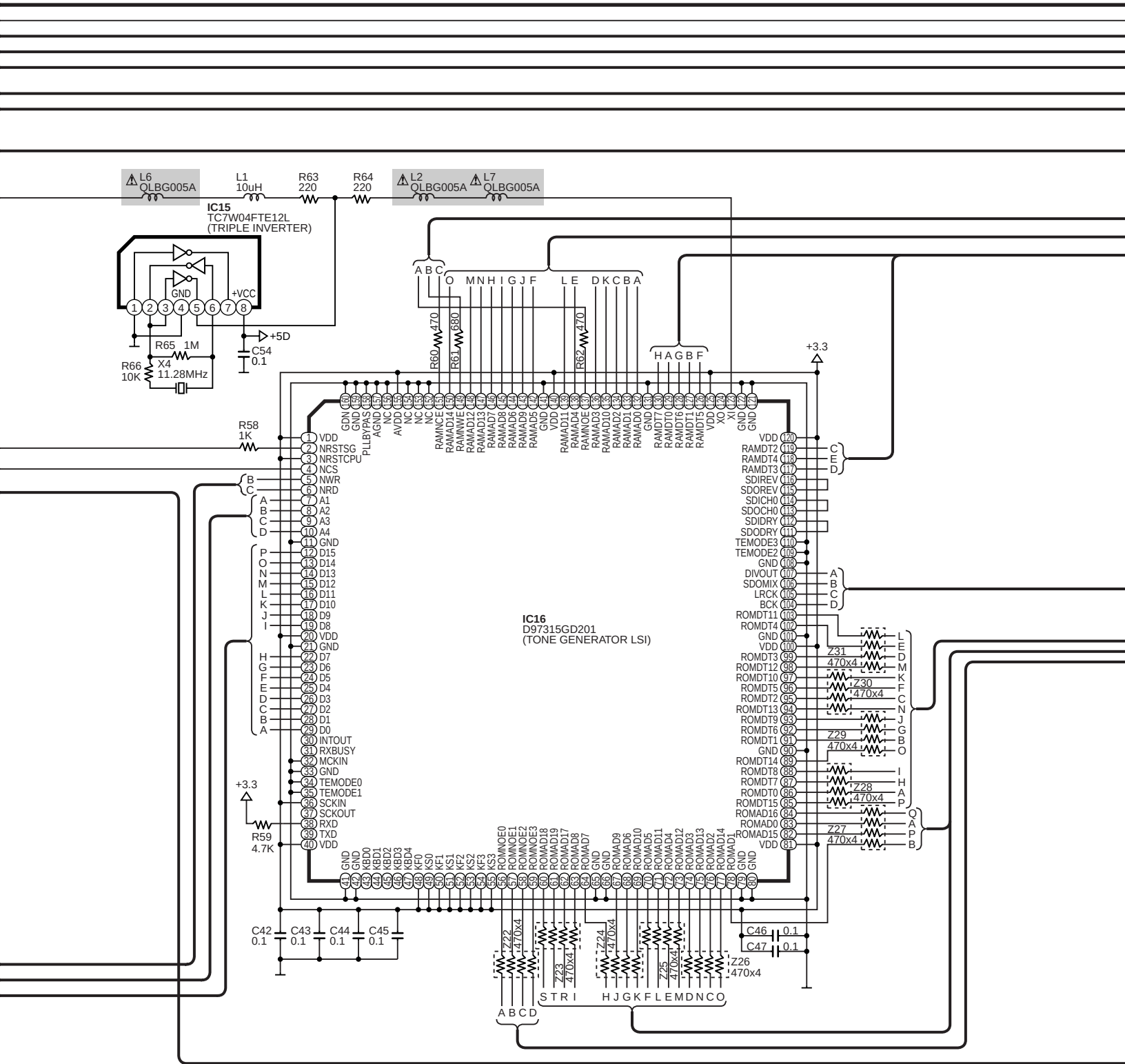
SCHEMATIC DIAGRAM-3



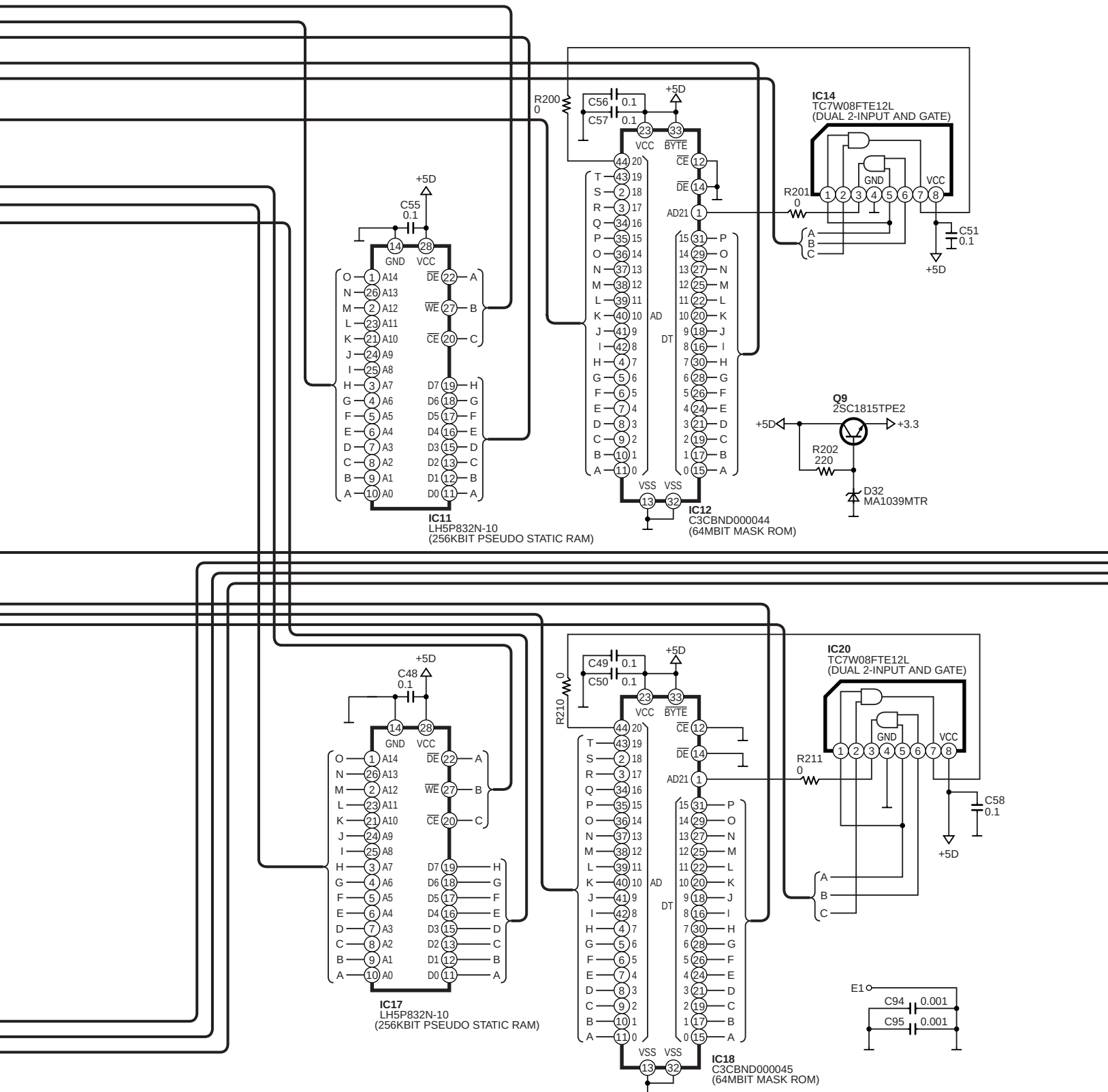
SCHEMATIC DIAGRAM-4



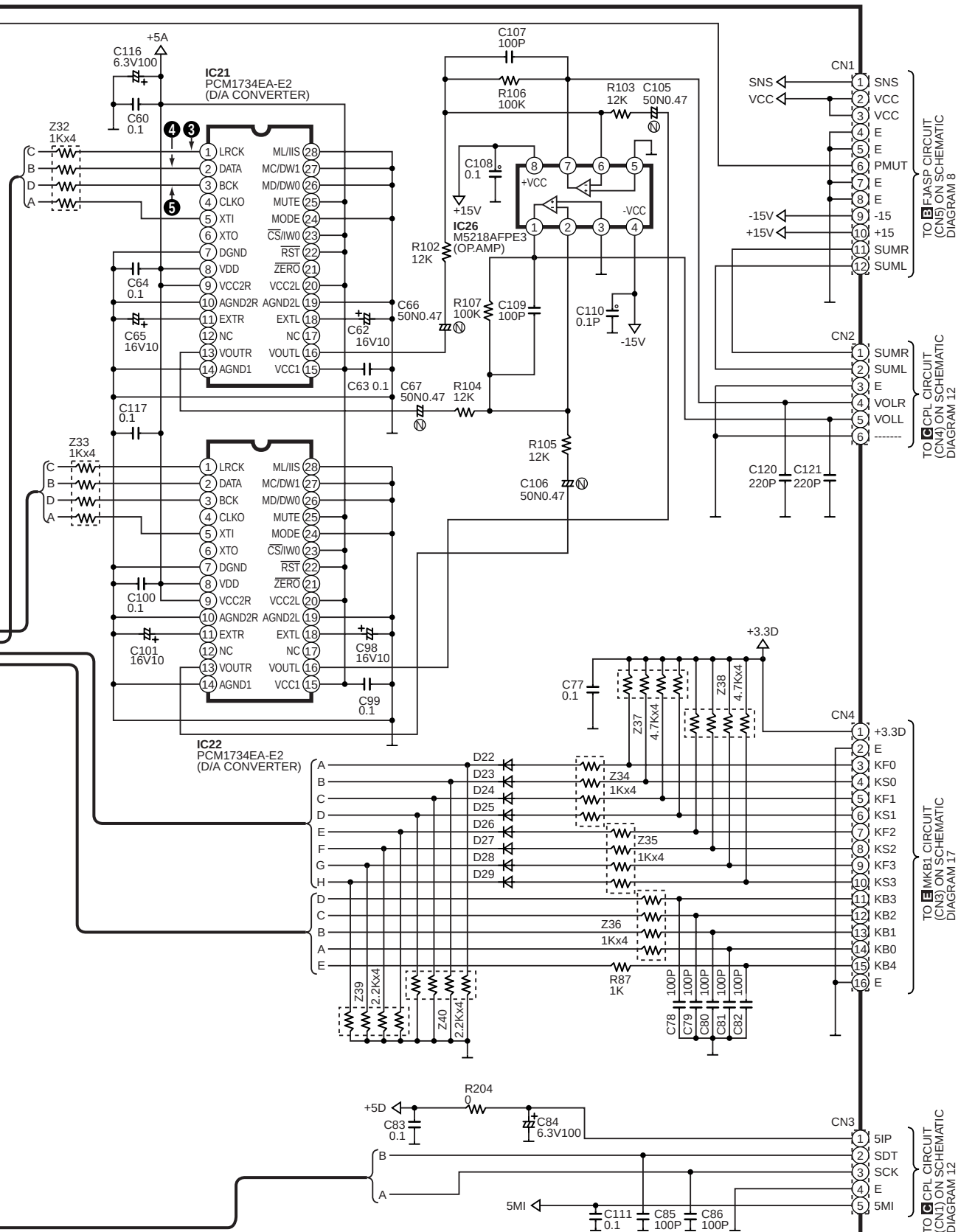
SCHEMATIC DIAGRAM-5



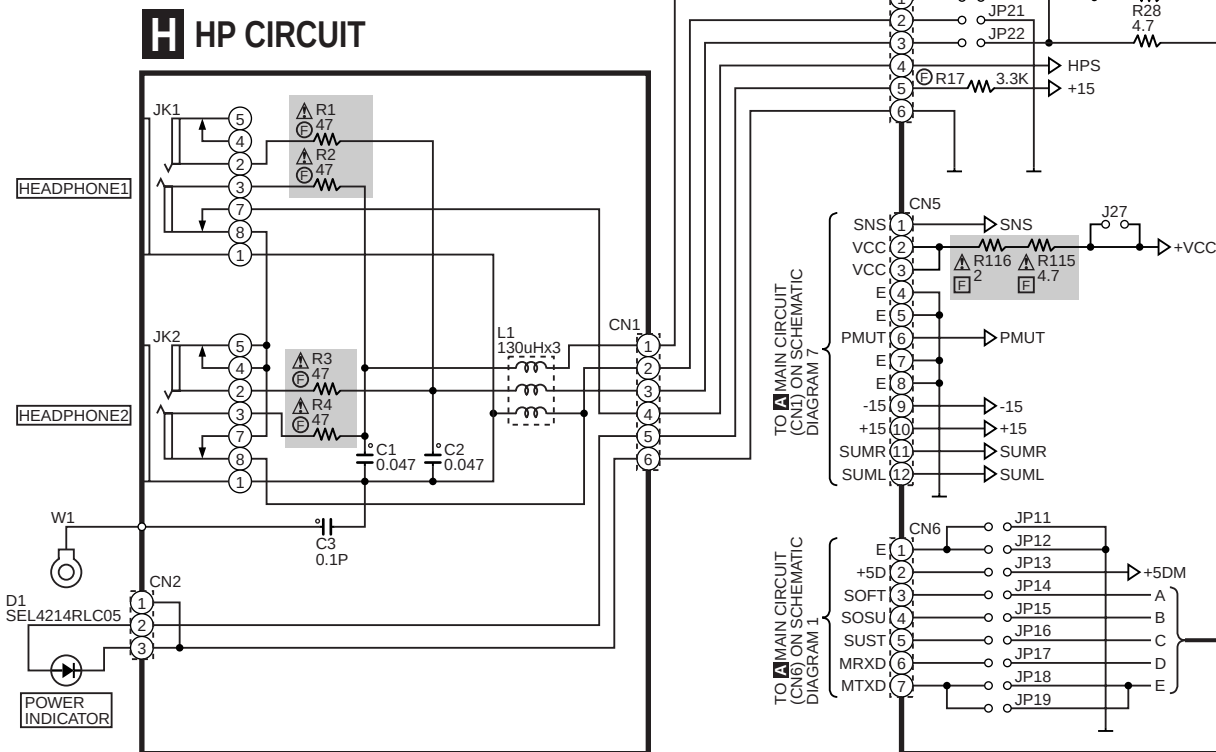
SCHEMATIC DIAGRAM-6



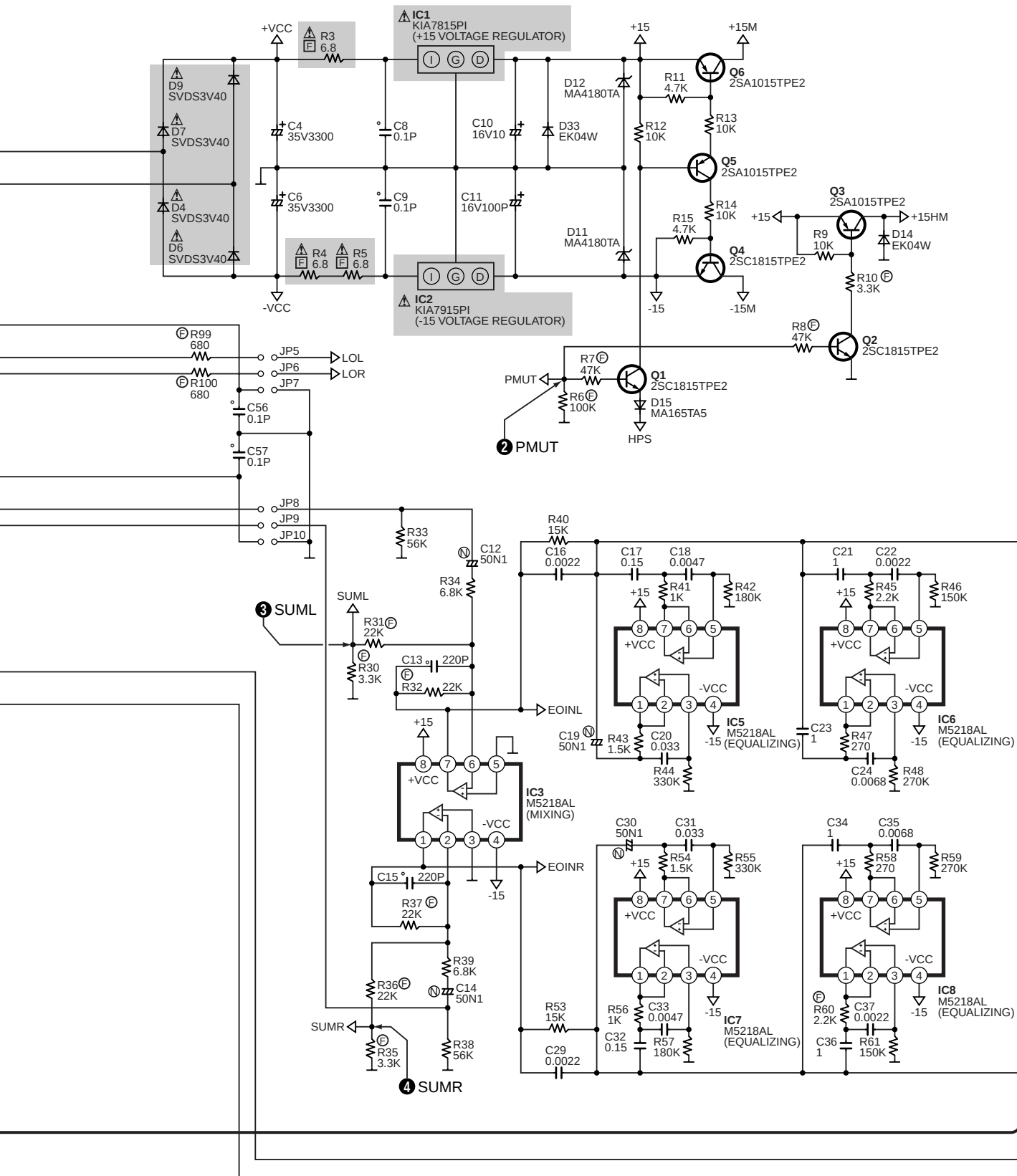
SCHEMATIC DIAGRAM-7



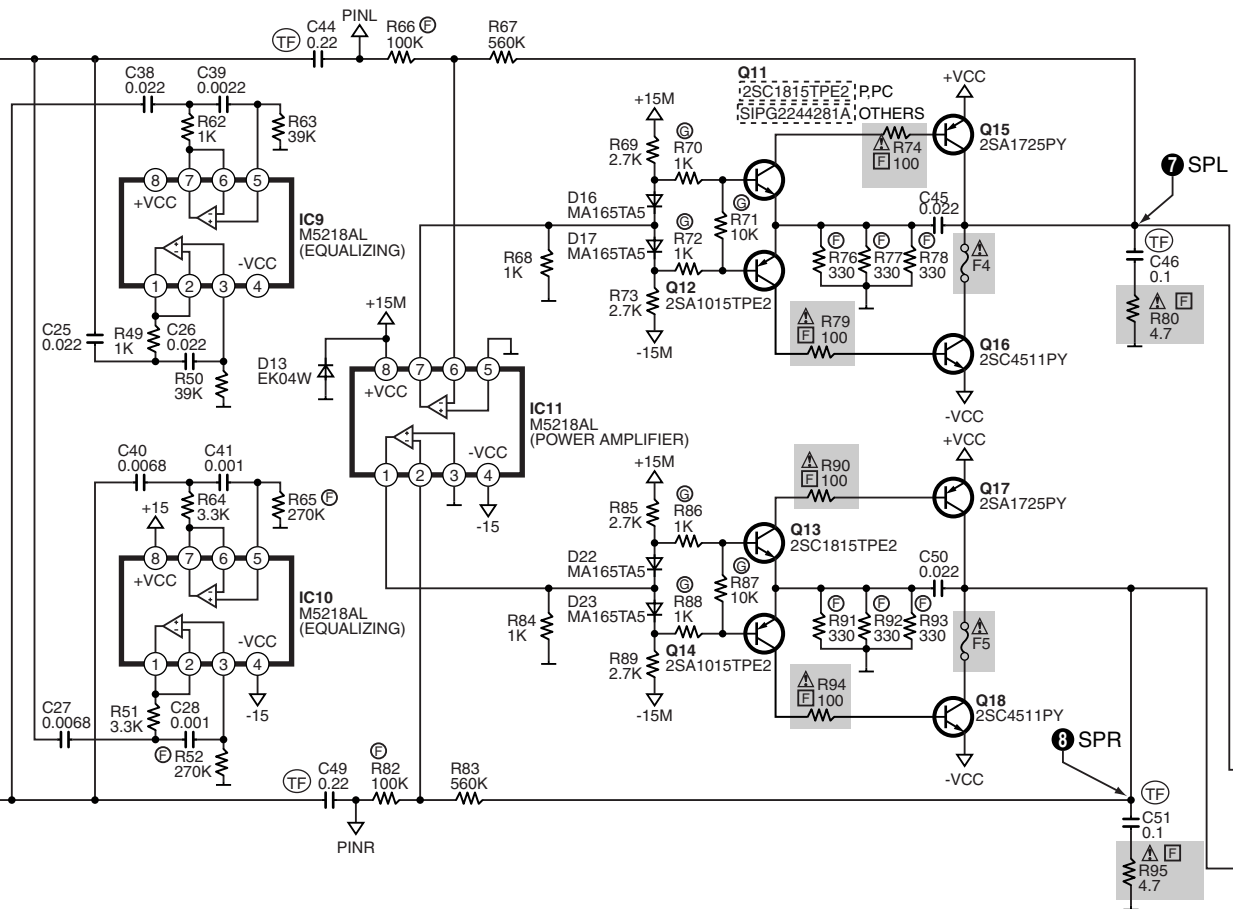
B FJASP CIRCUIT



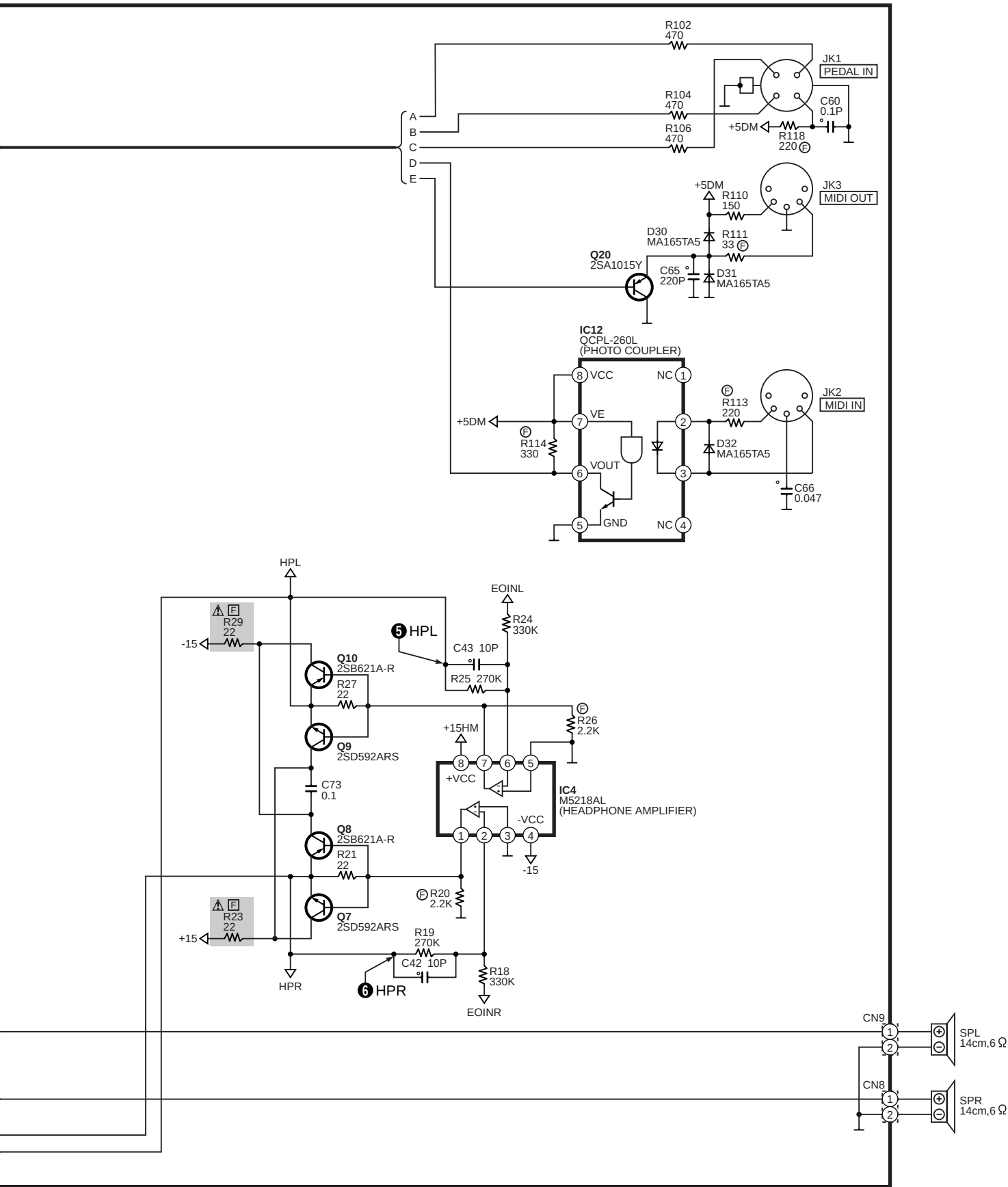
SCHEMATIC DIAGRAM-9



SCHEMATIC DIAGRAM-10

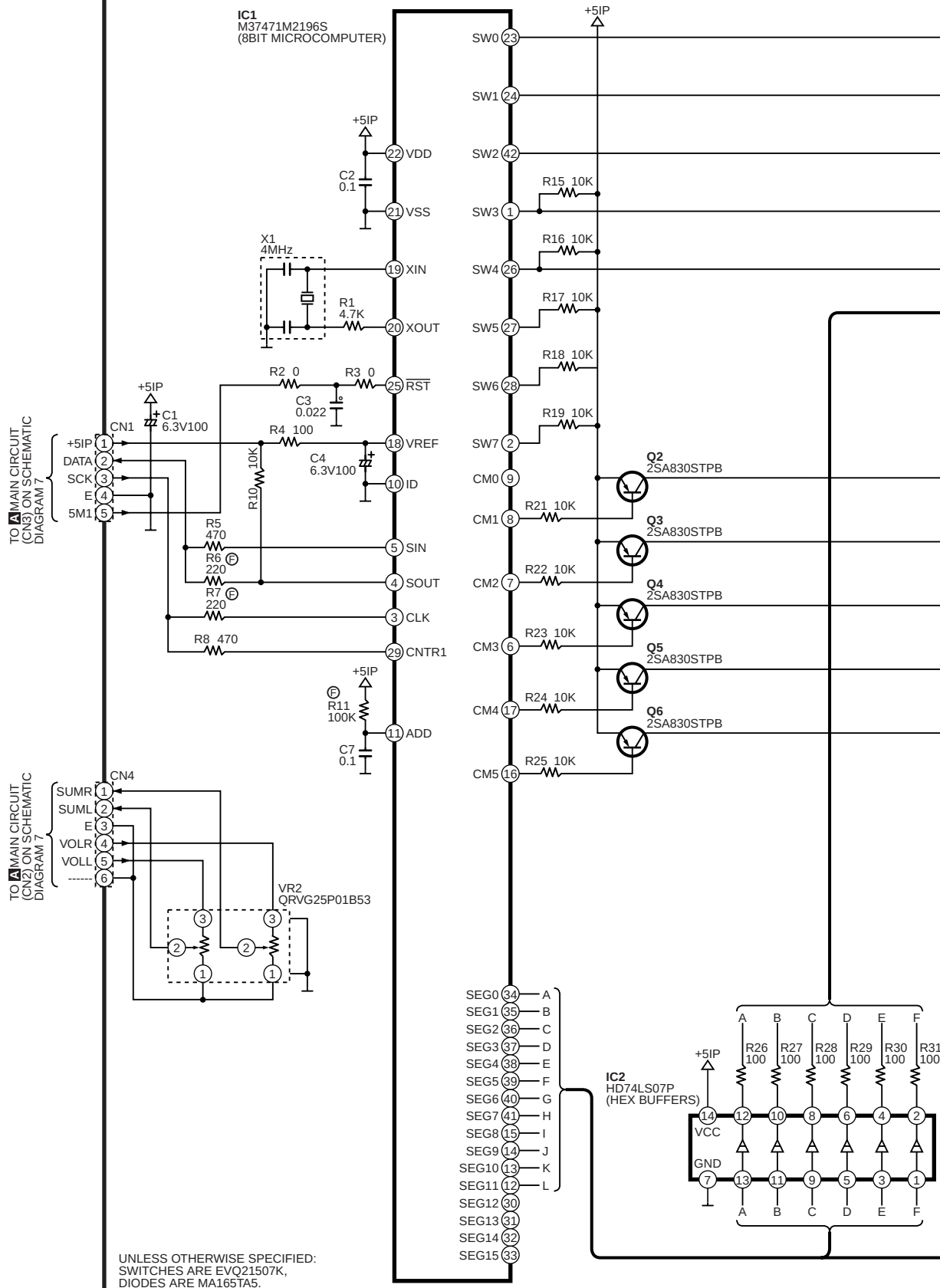


SCHEMATIC DIAGRAM-11

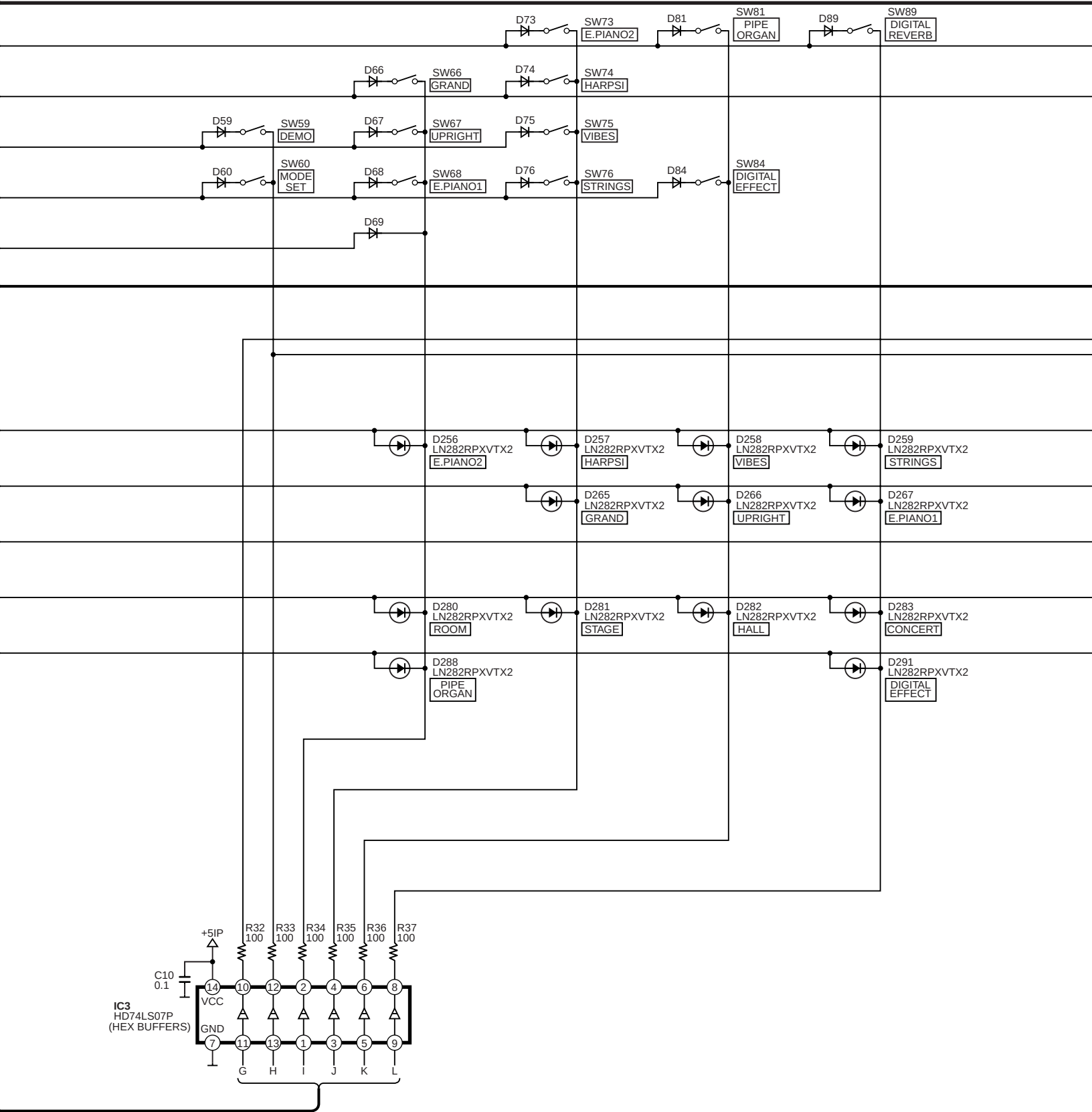


SCHEMATIC DIAGRAM-12

C CPL CIRCUIT

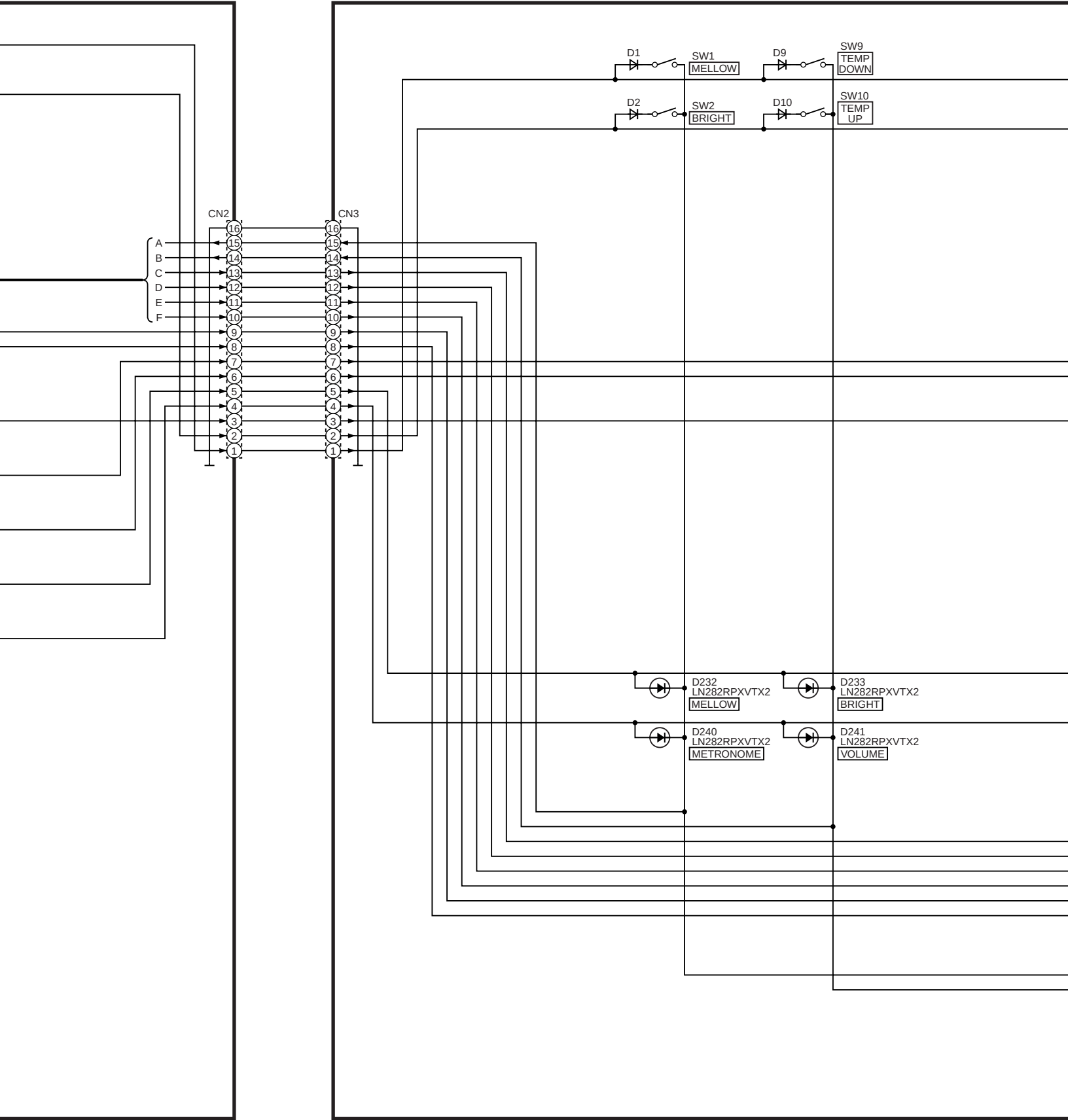


SCHEMATIC DIAGRAM-13

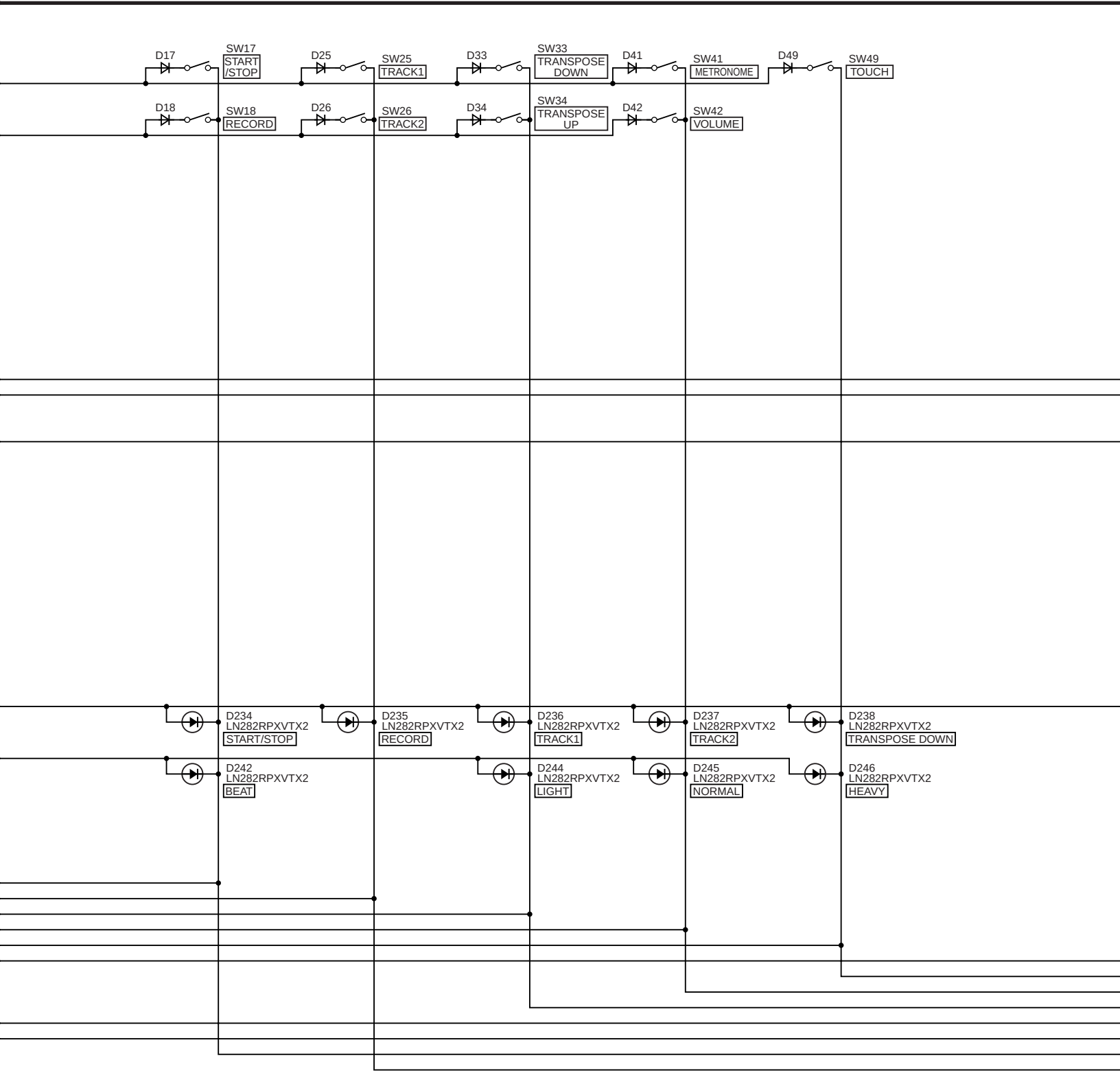


SCHEMATIC DIAGRAM-14

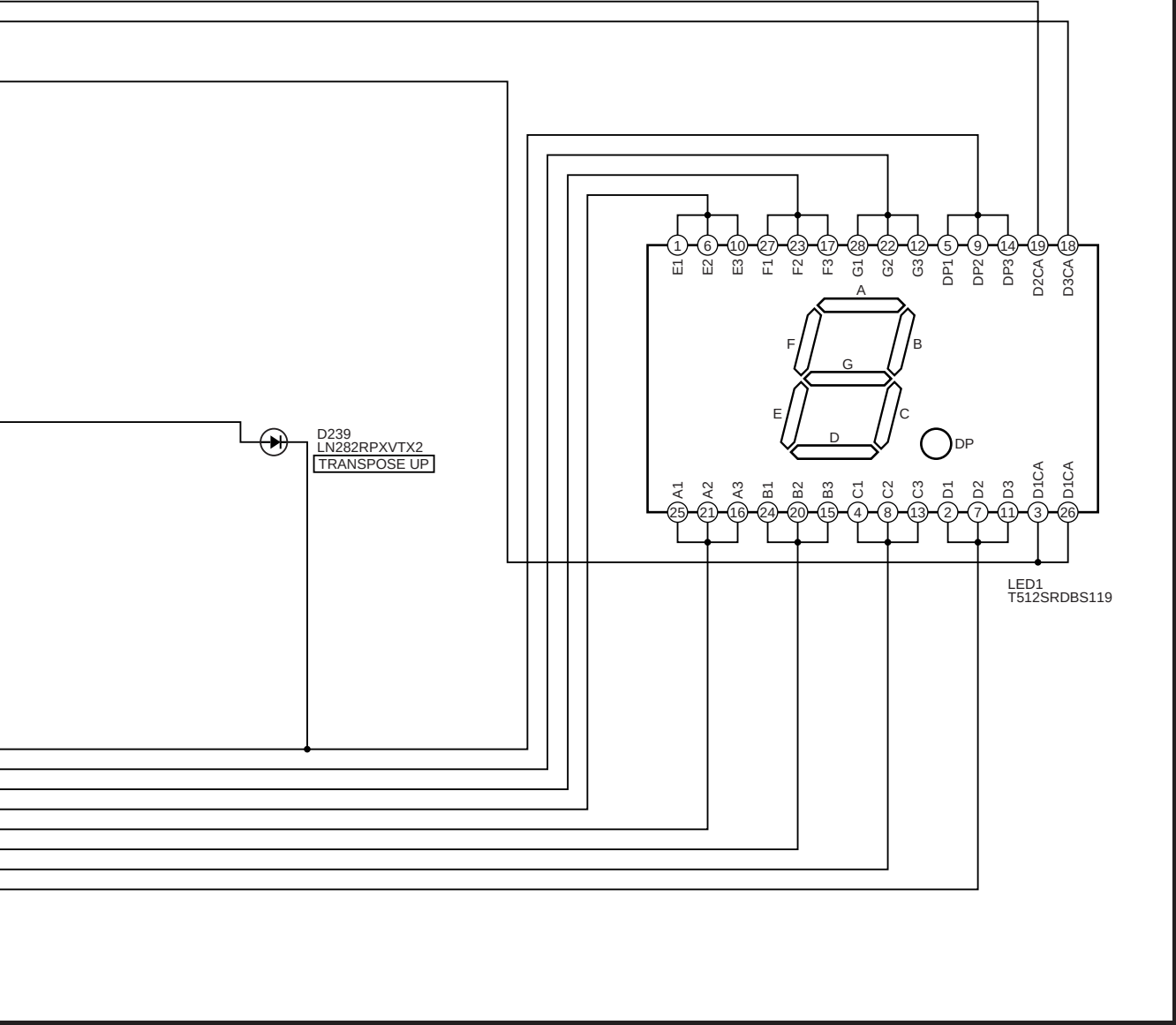
D CPR CIRCUIT



SCHEMATIC DIAGRAM-15

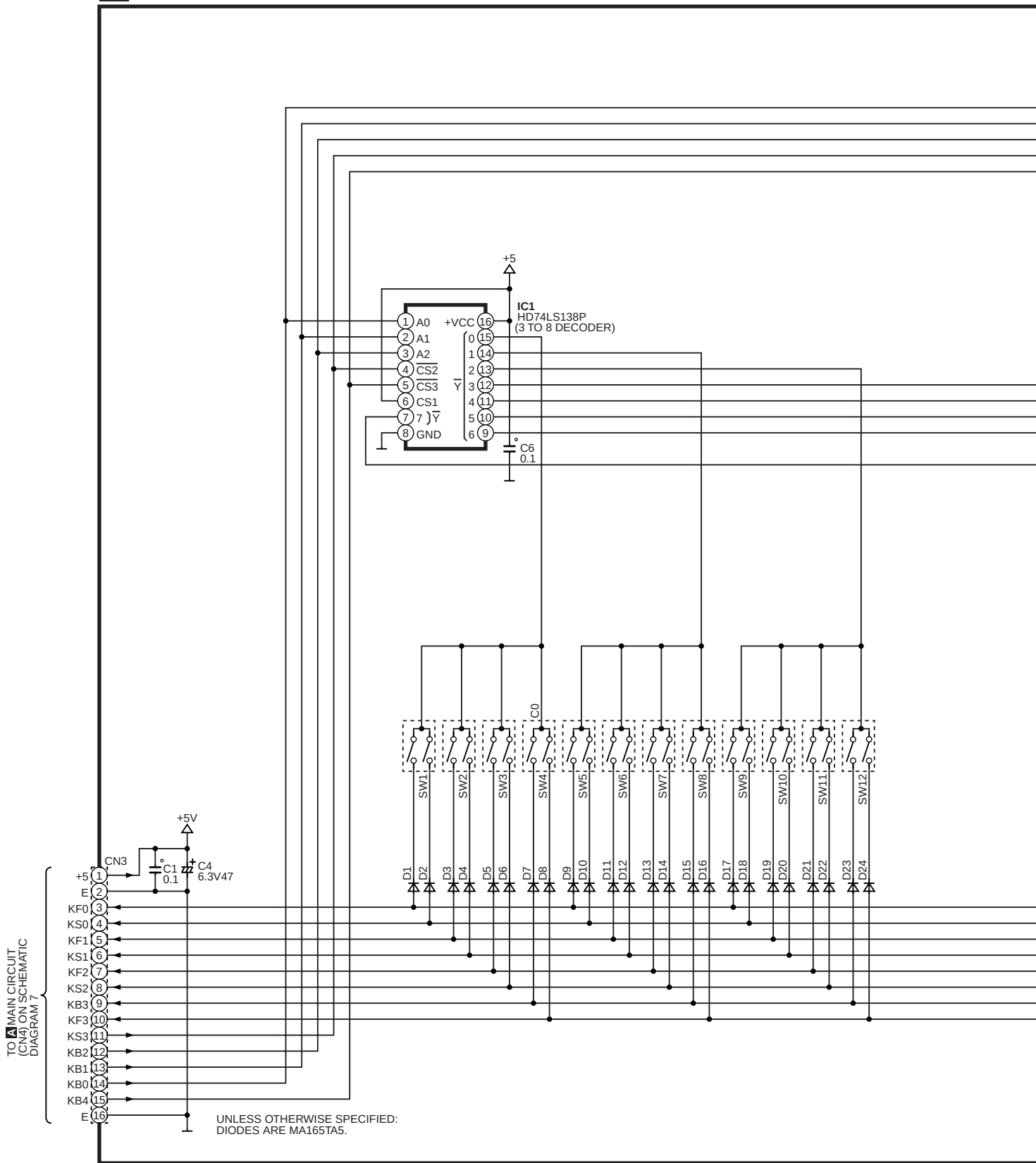


SCHEMATIC DIAGRAM-16

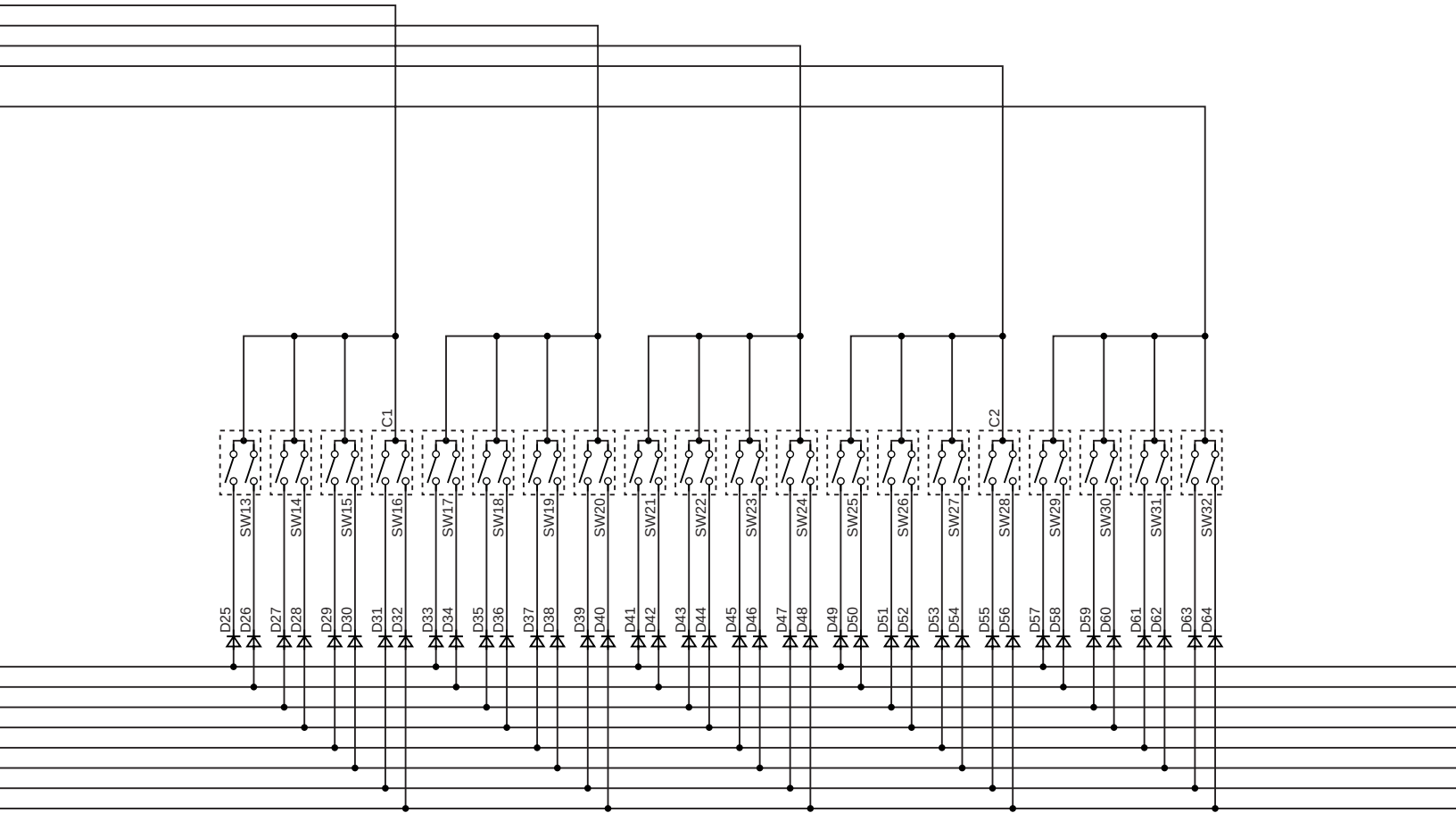


SCHEMATIC DIAGRAM-17

E MKB1 CIRCUIT

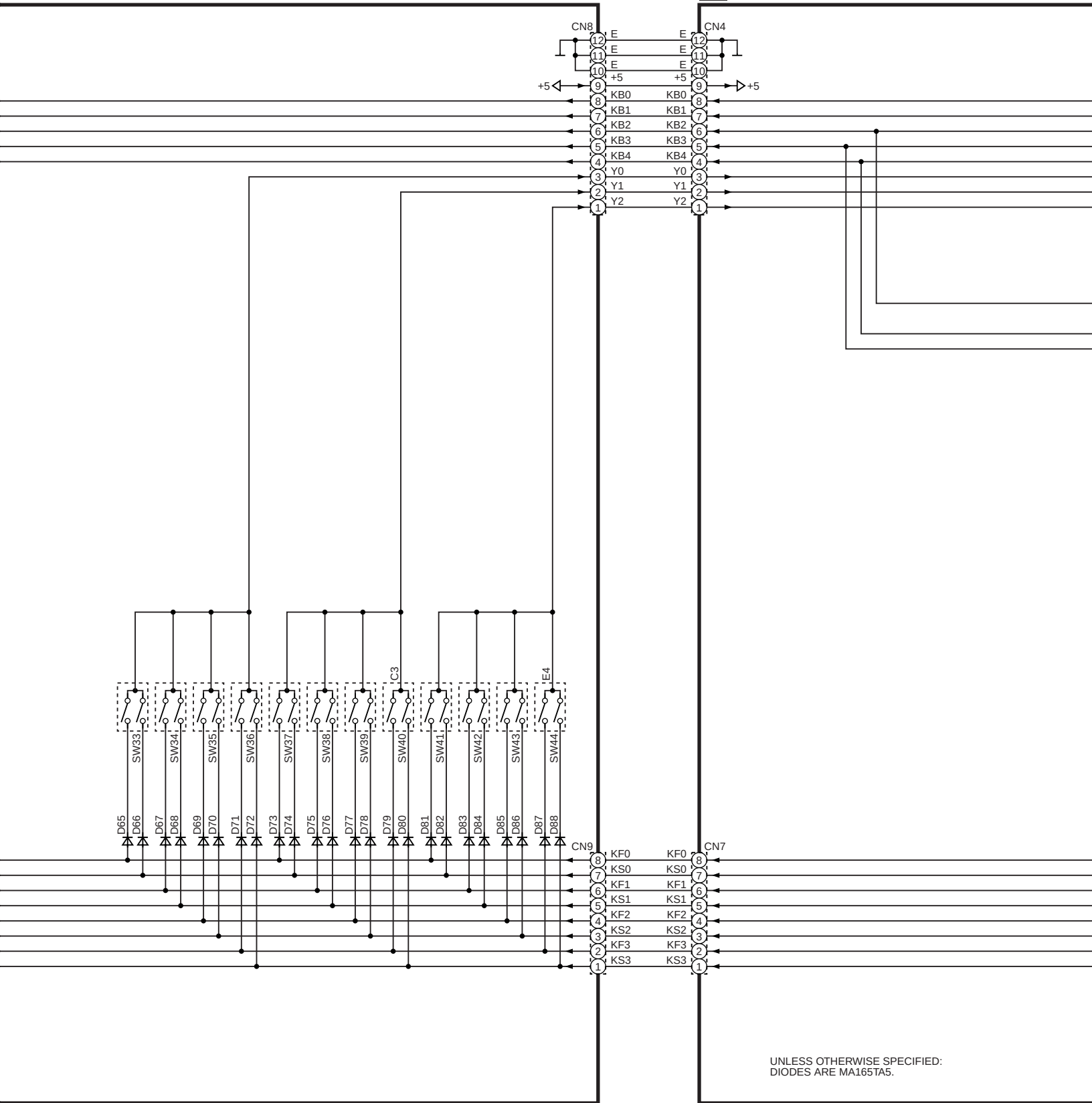


SCHEMATIC DIAGRAM-18



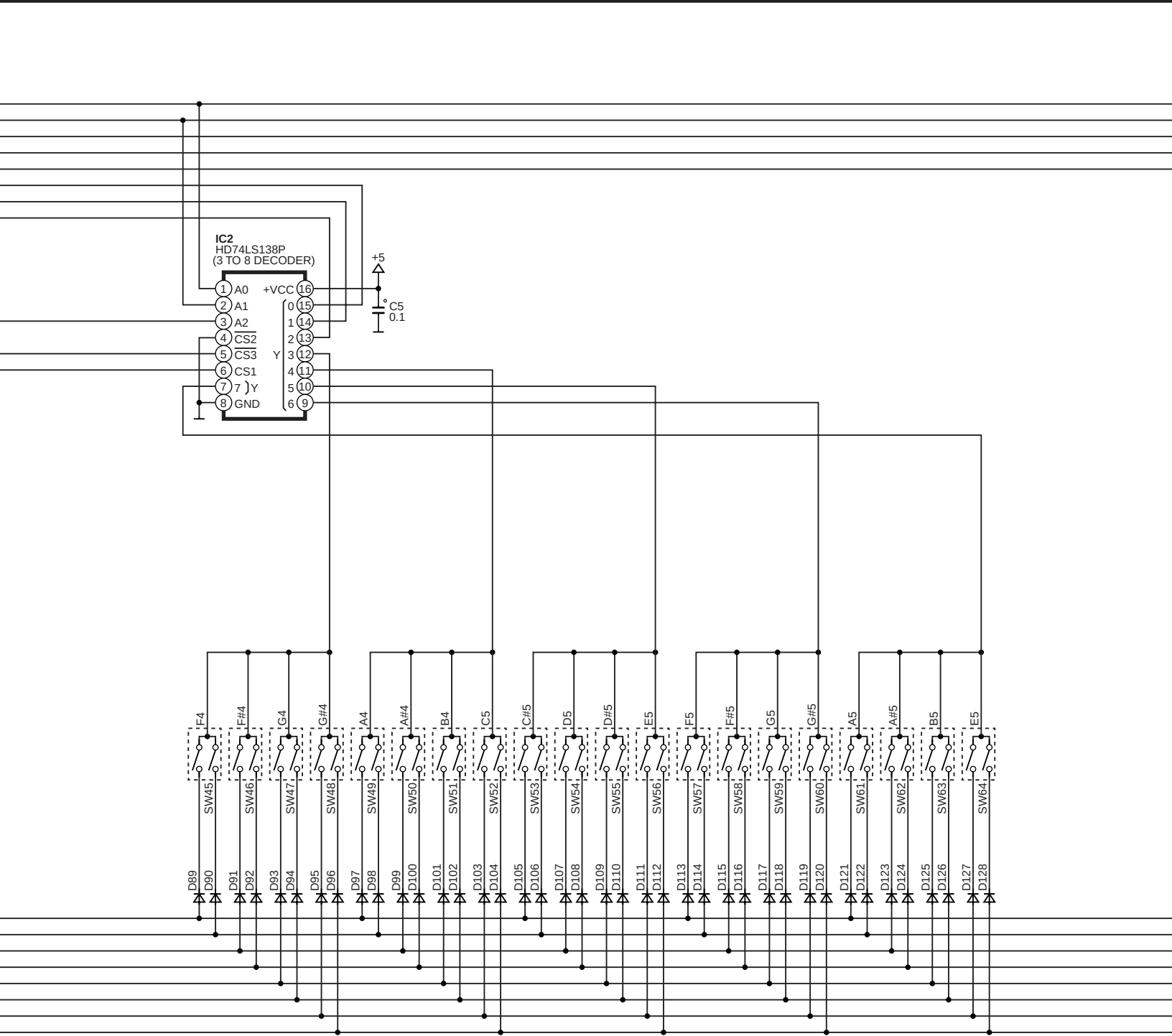
SCHEMATIC DIAGRAM-19

F MKB2 CIRCUIT

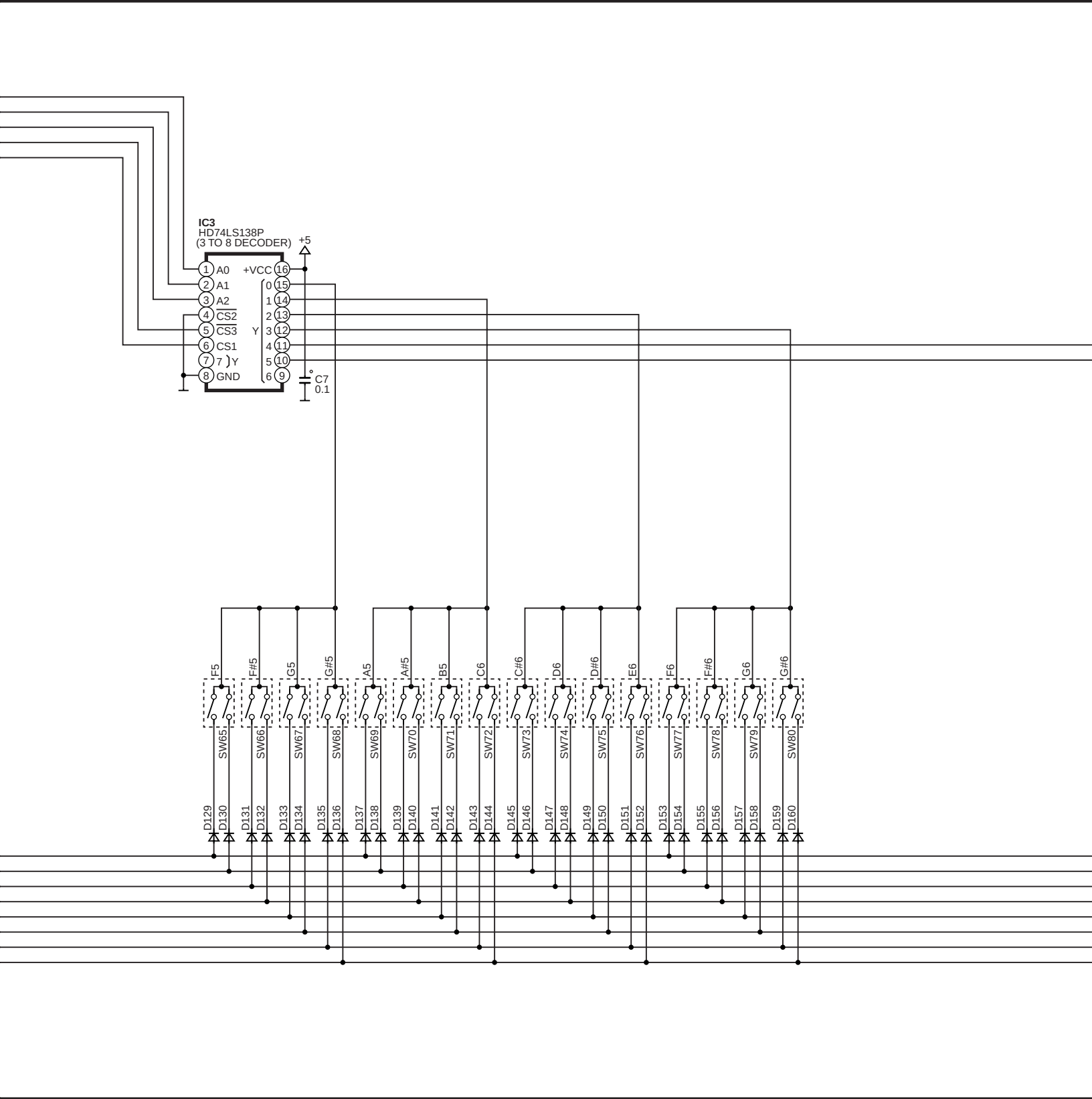


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DIODES ARE MA165TA5.

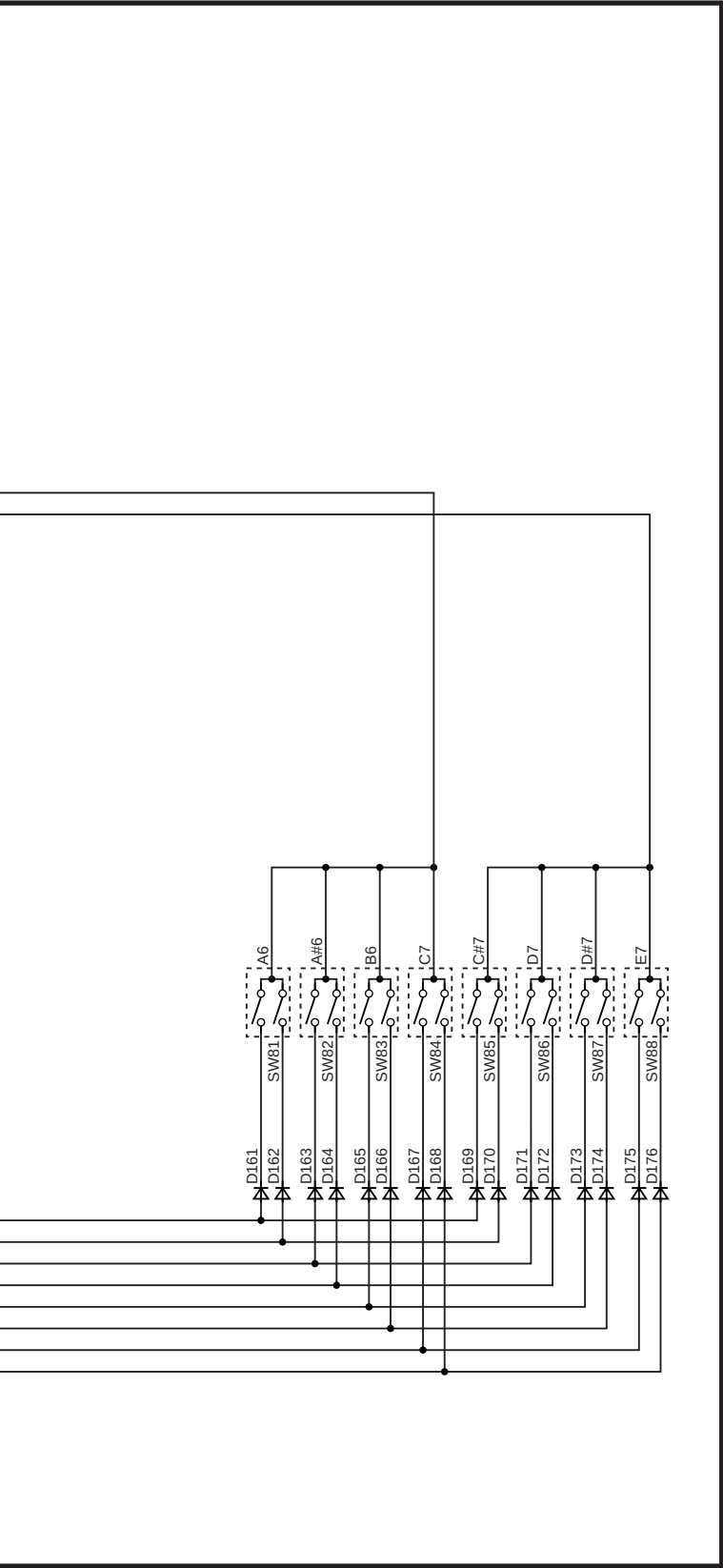
SCHEMATIC DIAGRAM-20



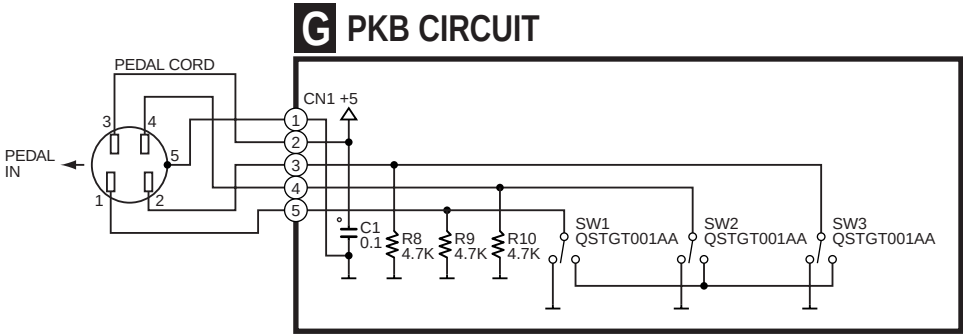
SCHEMATIC DIAGRAM-21



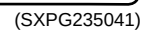
SCHEMATIC DIAGRAM-22



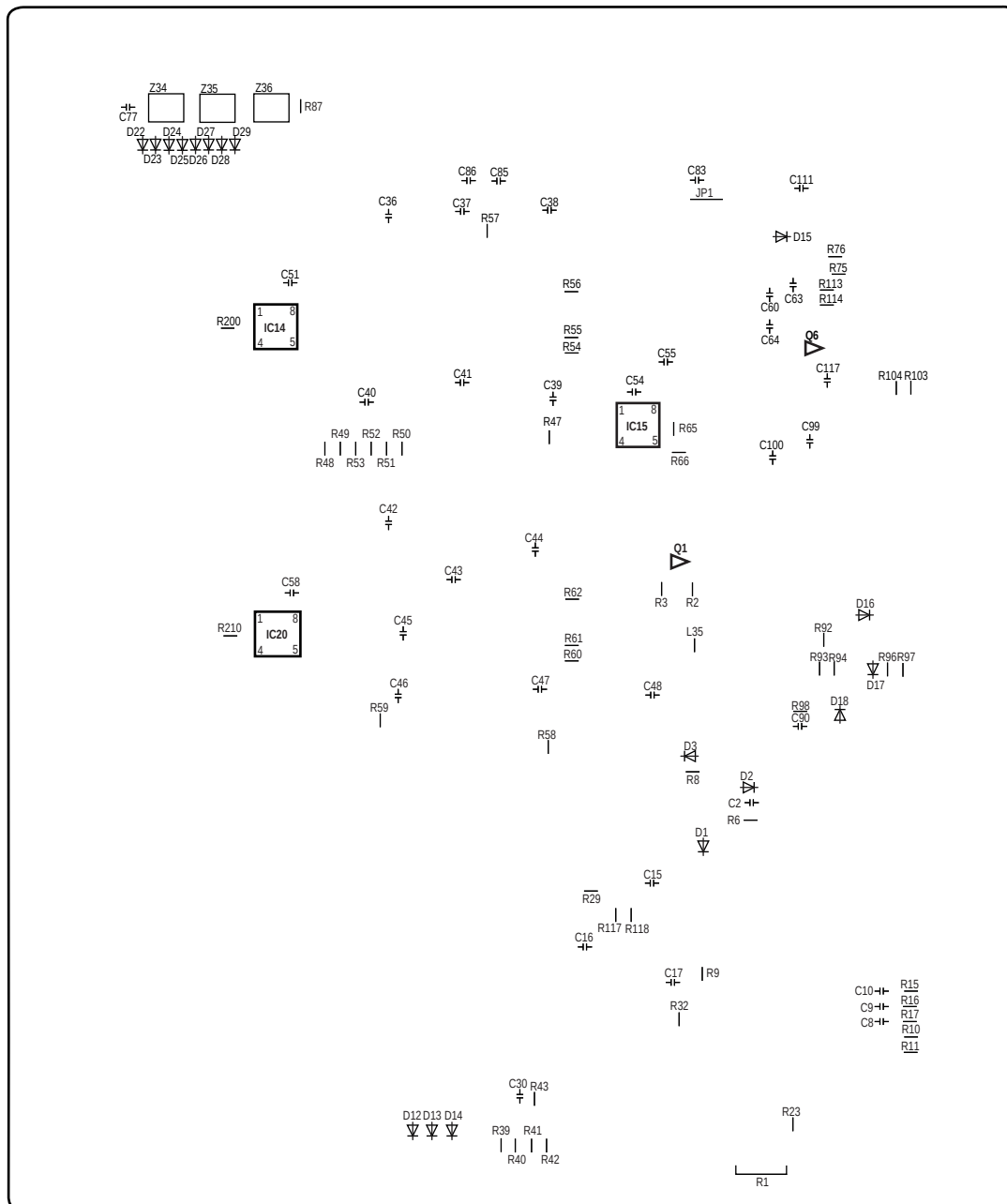
SCHEMATIC DIAGRAM-23



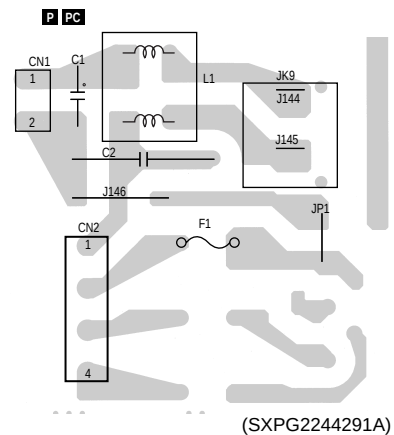
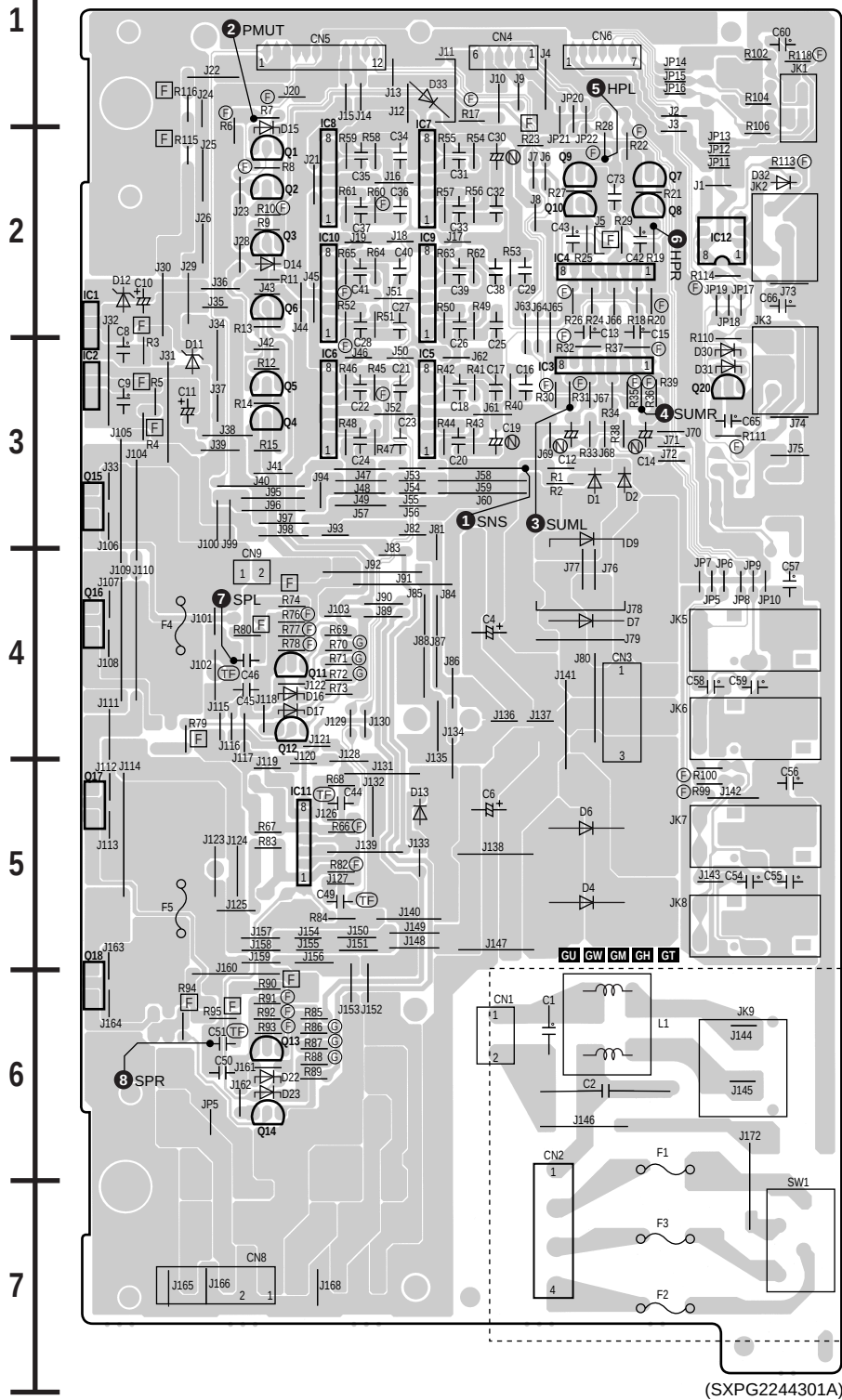
A



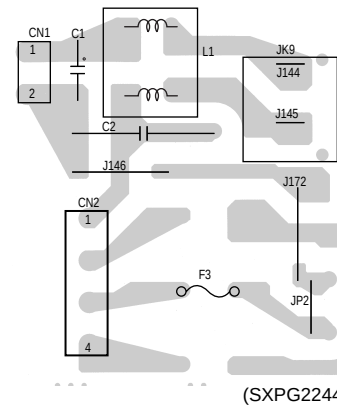
A MAIN P.C.B. (FOIL SIDE)



(SXPG235041)

B FJASP P.C.B.

OTHERS



(SXPG2244281A)

F

1

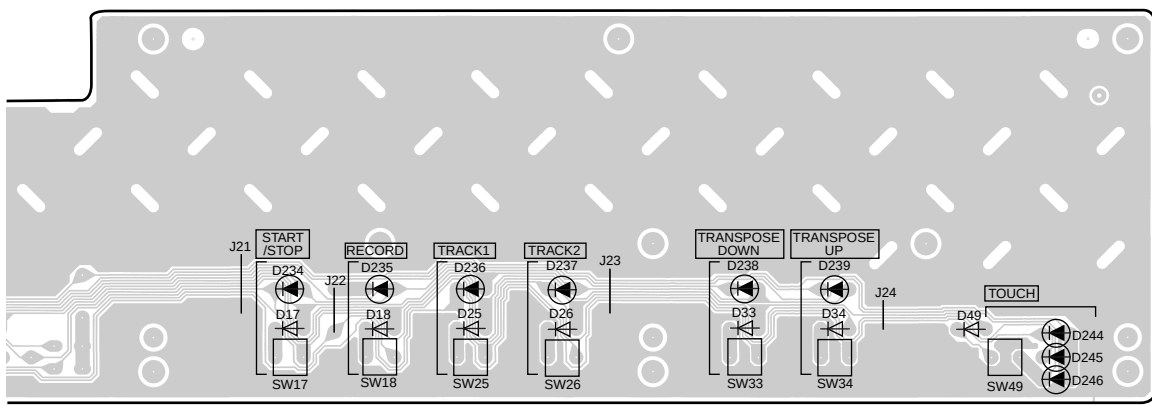
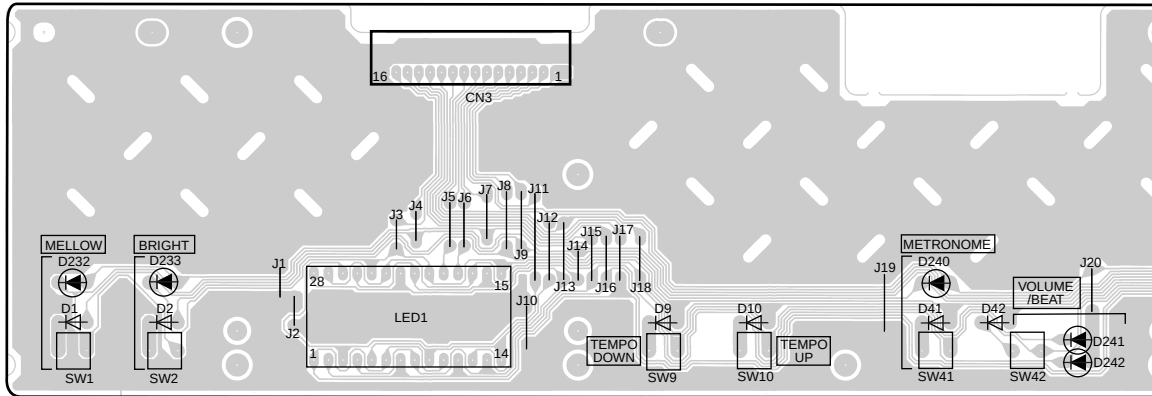


5

6

7

D CPR P.C.B.



(SXPG227861B)

A

B

C

D

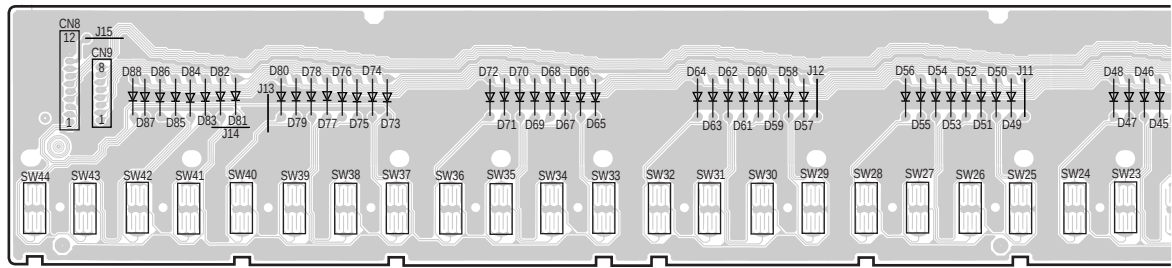
E

F

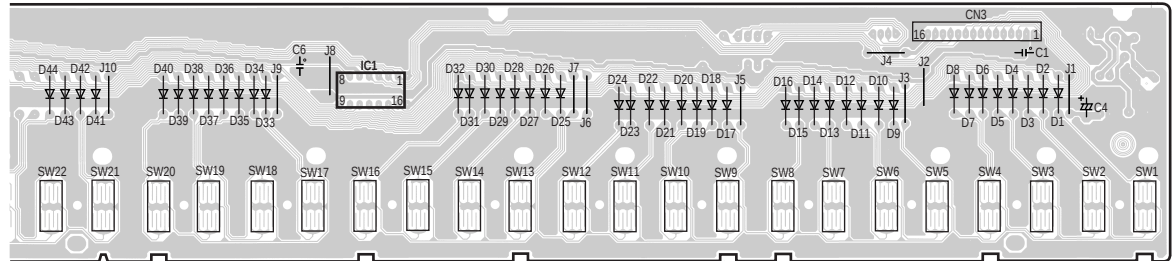
1

E MKB1 P.C.B.

2



3

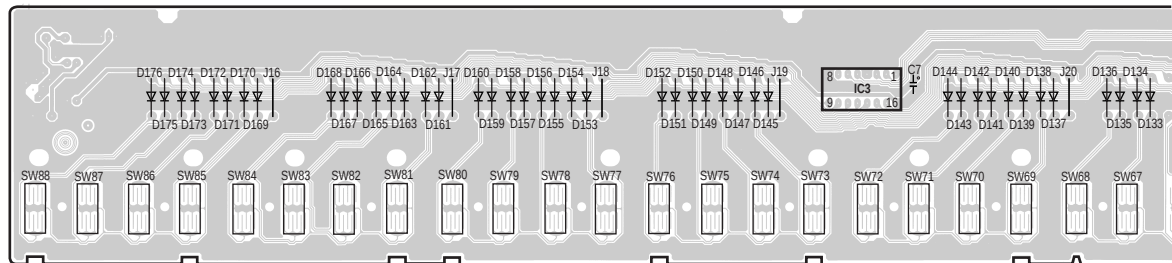


(SXPG231111A)

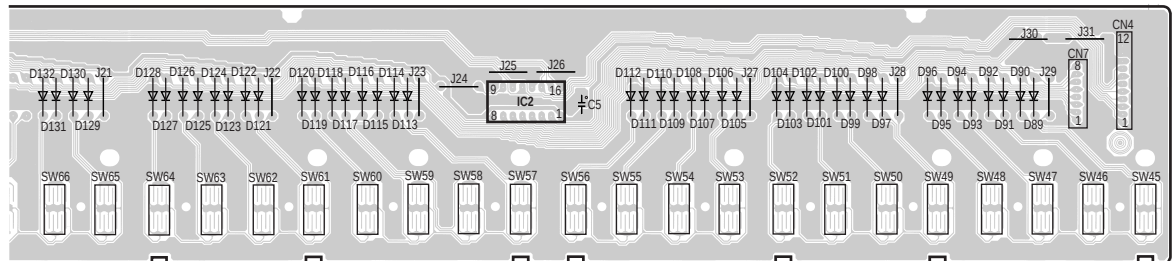
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F MKB2 P.C.B.

5



6

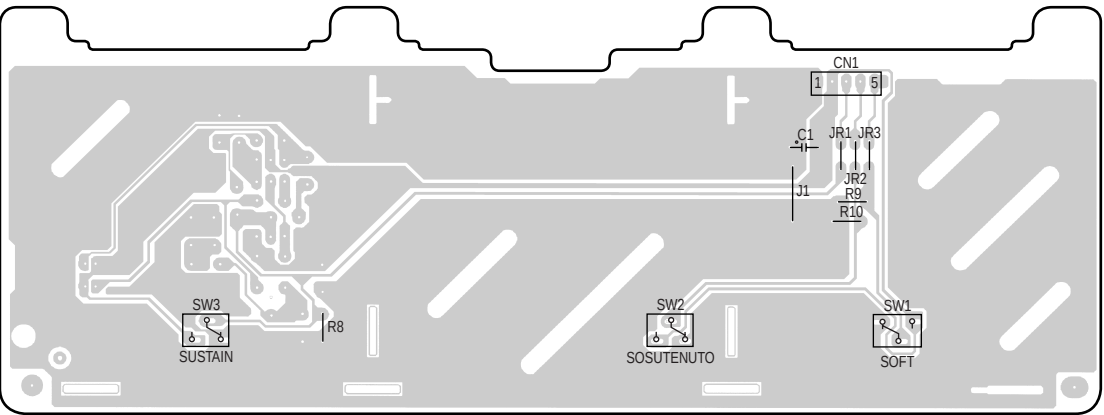


(SXPG231111B)

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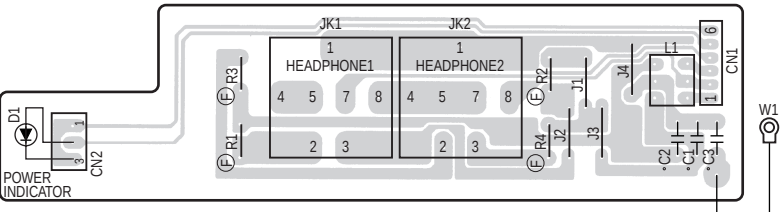
A B C D E F

G PKB P.C.B.

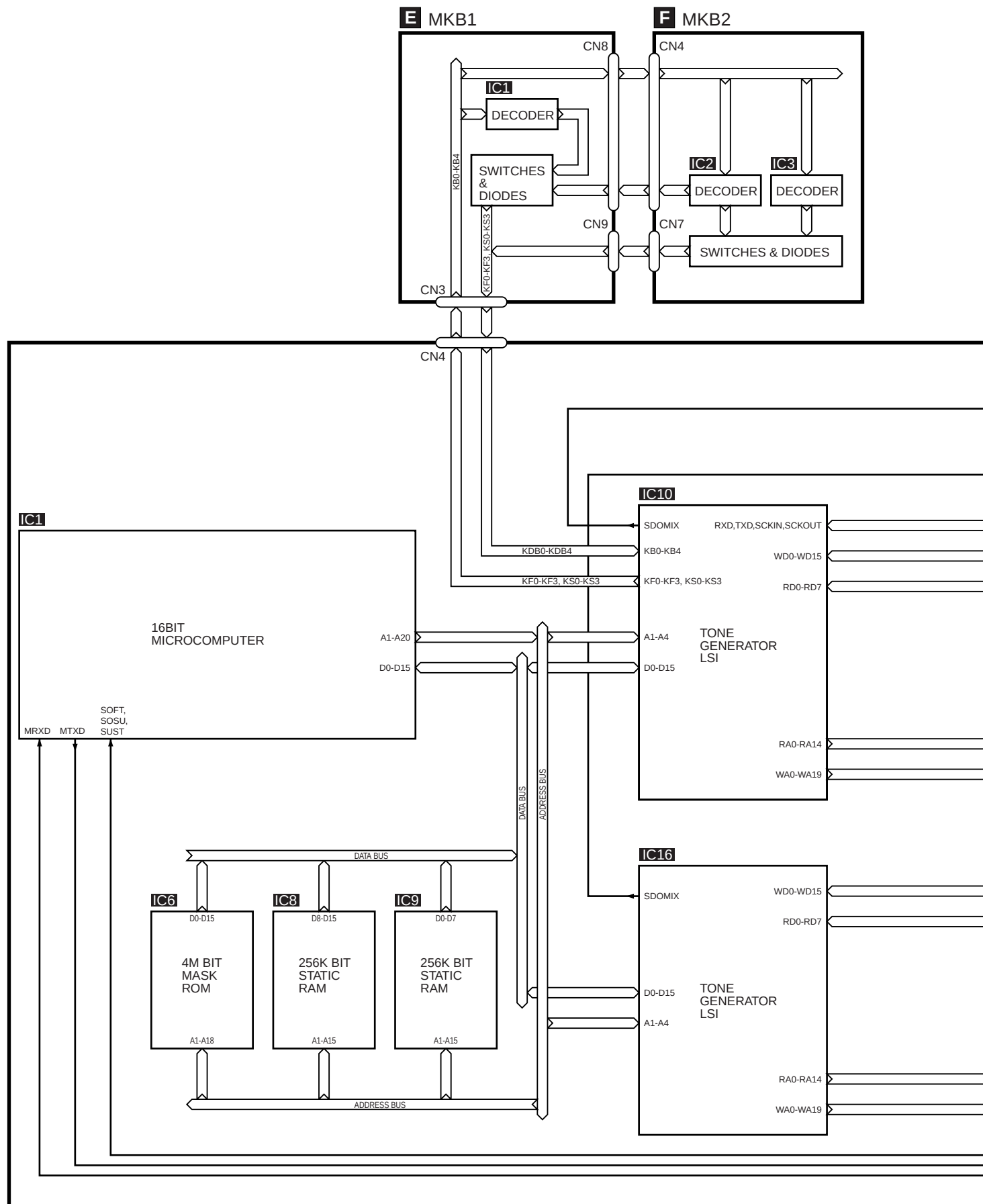


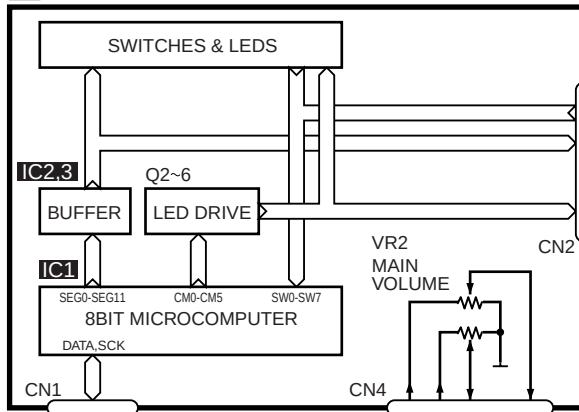
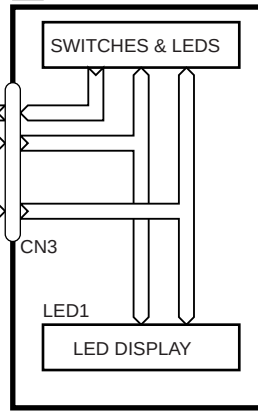
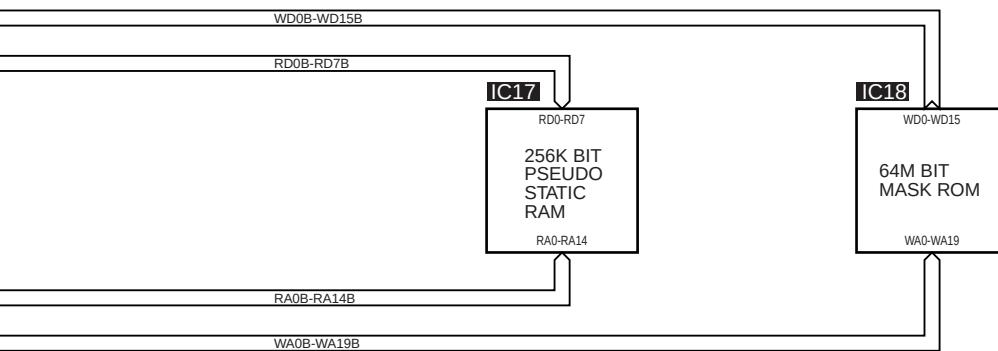
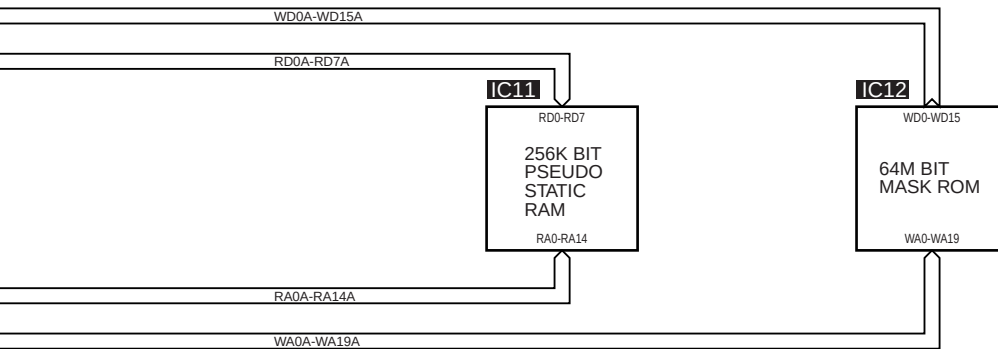
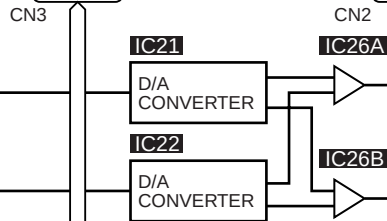
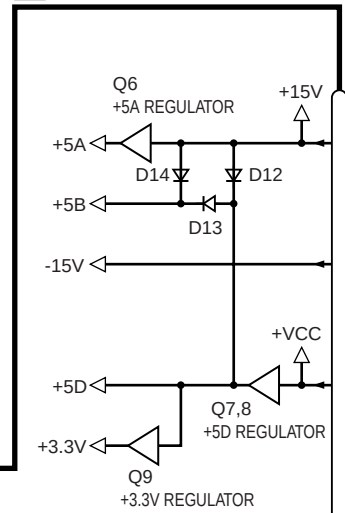
(SXP218221)

H HP P.C.B.



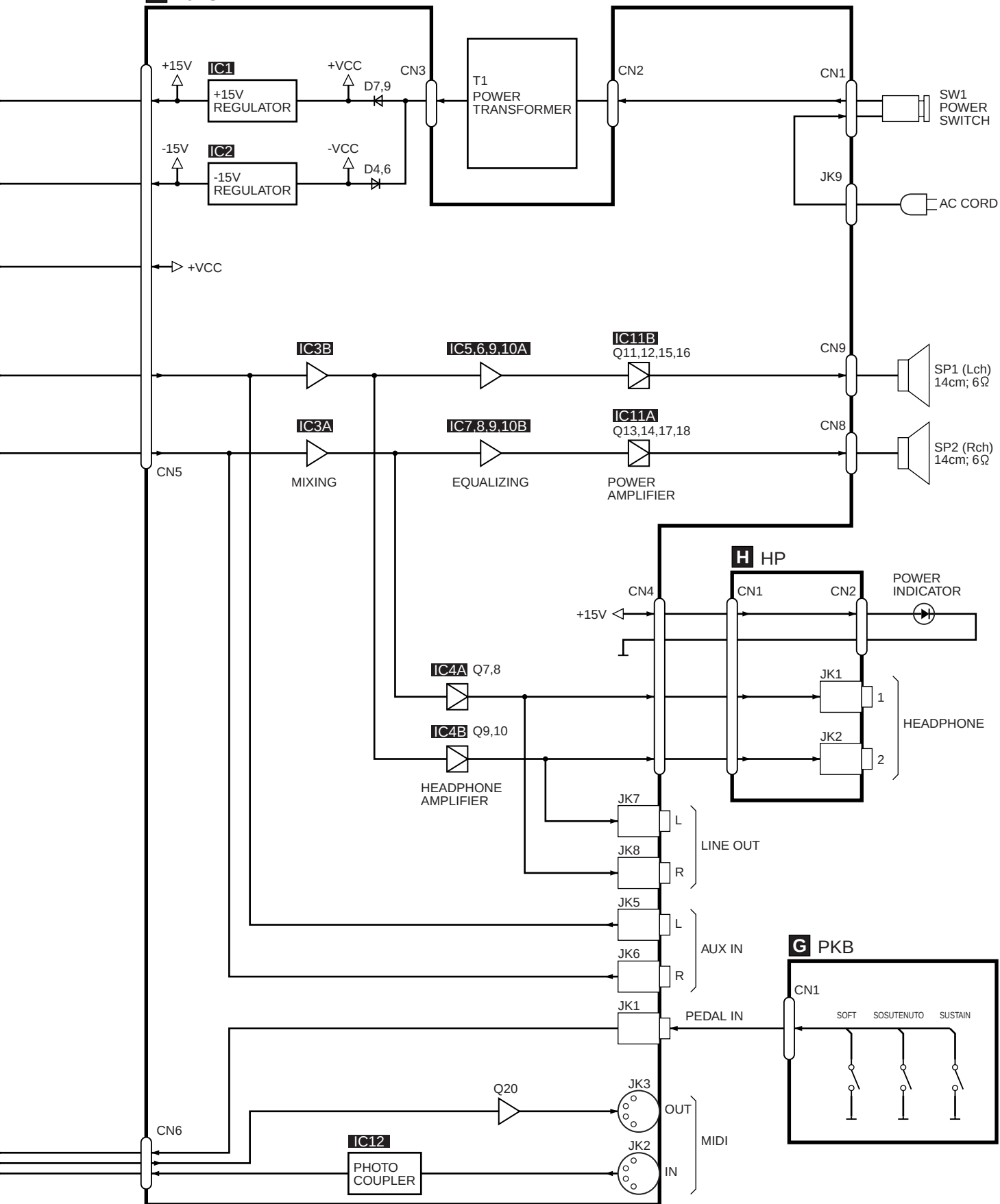
(SXP224322)

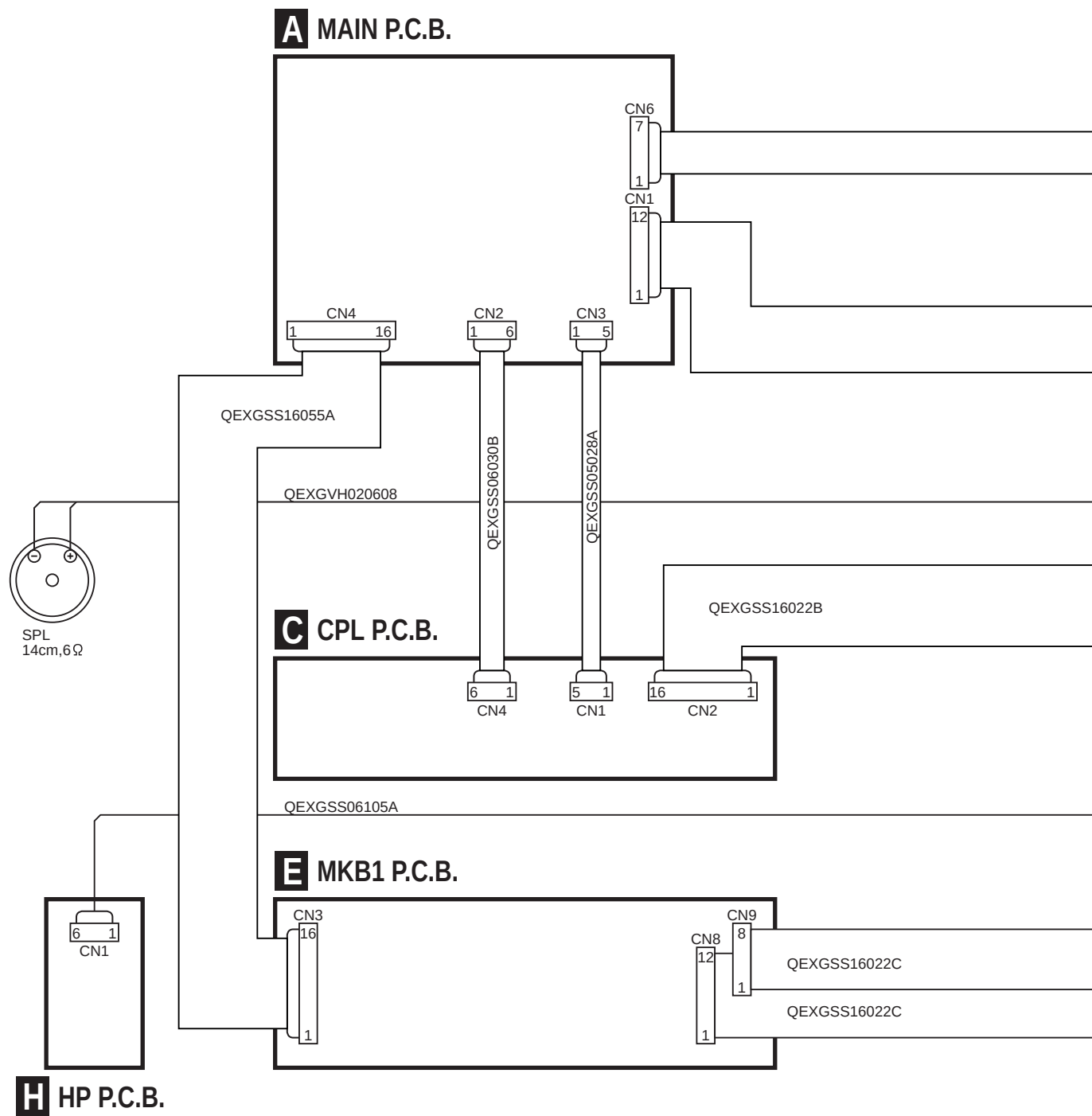


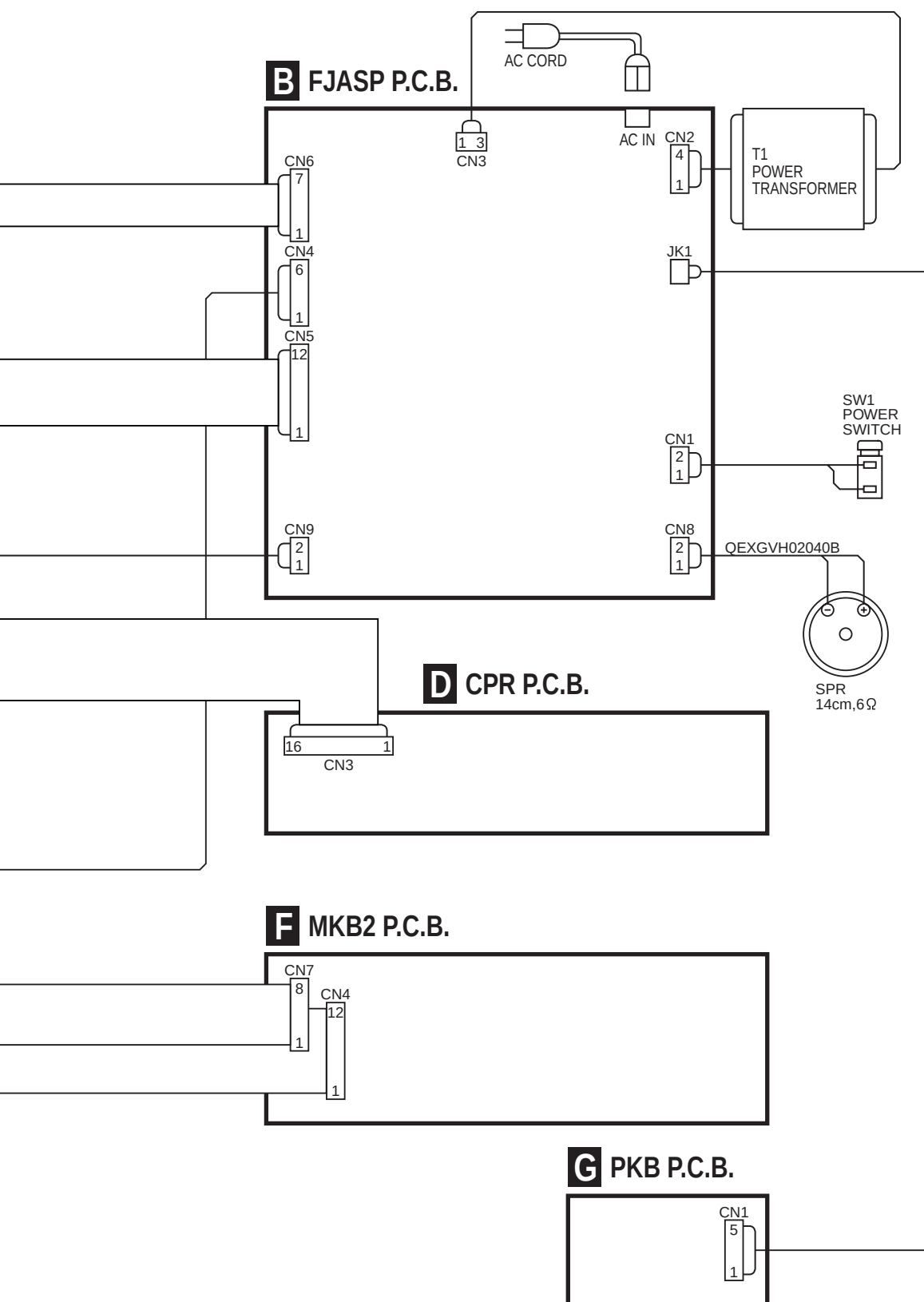
C CPL**D** CPR**A** MAIN

CN6

B FJASP



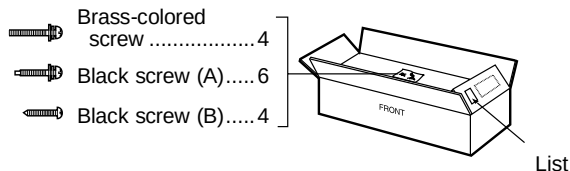




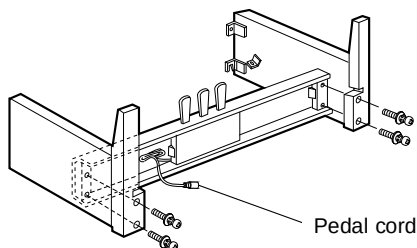
Follow the steps below to assemble your Technics piano. Make sure you are using the correct parts and that they are in the correct direction.

- At least 2 people are required for assembly.
- To disassemble the piano, reverse the procedure.

1. Remove the packing and take the parts out of the carton. Confirm that all the parts on the printed list are present.

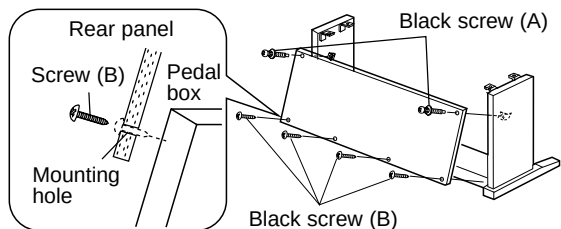


2. Affix the right and left side planks to the pedal box.



- (1) Use the 4 brass-colored screws to secure the planks.
- (2) Be sure to insert the screws straight.
 - If a screw is inserted crookedly, it may be damaged.
- (3) Insert each of the 4 screws partway, lightly securing each one little by little. After confirming that the screws are all correctly inserted, tighten each one securely.
 - If each screw is tightened securely before all the screws are inserted, the last screw may be very difficult to insert.
- (4) Extend the pedal cord on the inner side of the pedal box.

3. Affix the rear panel.



- For the brown wood grain model: affix the rear panel so that the wood grain surface is facing the front.

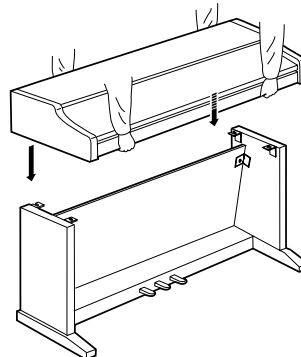
- (1) Insert the 2 black screws (A) partway in the upper part of the rear panel, securing them only lightly. Do not tighten the screws completely at this time.
 - If the screws are tightened securely at this time, it may be difficult to affix the lower part of the rear panel.

- (2) Insert the 4 black screws (B) through the mounting holes in the lower part of the rear panel and tighten the screws fully.

- Run the screws directly into the pedal box as there are no rough holes in the pedal box.

- (3) Tighten the 2 black screws (A) in the upper part of the rear panel completely.

4. Place the piano body on the stand.



WARNING:

Avoid pinching your fingers.

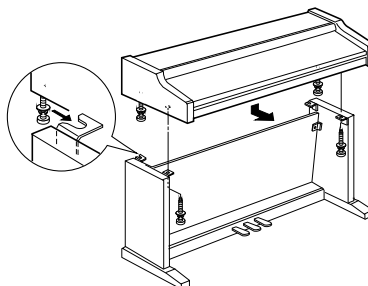
Note 1

Holding the piano body at least 10 cm in from the edge, place it on the stand so that it does not fall off.

Note 2

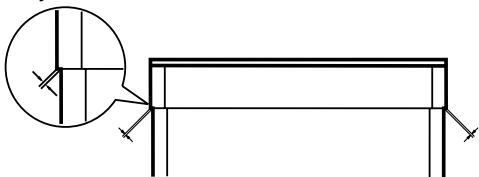
If the piano body is placed too far to the right or left, or to the front or back, it will become unstable.

5. Secure the piano body to the stand.



- (1) Insert 2 black screws (A) in the 2 rear screw holes on the underside of the piano body, and turn each screw 5 or 6 times. Push the piano body forward so that the screws are fully inserted in the cutout of the metal piece on either side plank. (This enables you to easily position the piano body on the stand.)

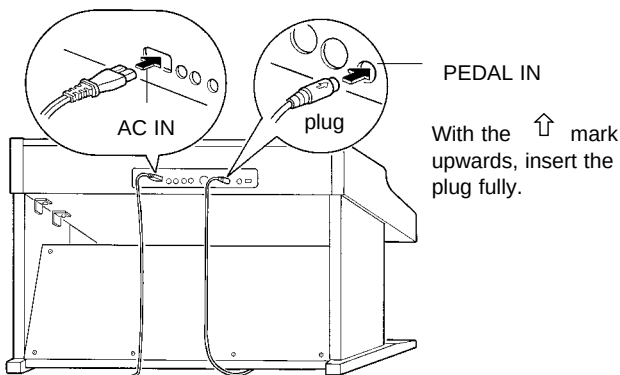
- (2) Adjust the piano body so that the right and left sides project evenly over the stand.



- (3) Positioning the piano body on the stand, confirm that the 4 balck screws (A) can easily be inserted.

- (4) Tighten the 4 screws securely.

6. Connect the pedal cord and power cord to the terminals.



- Plug the pedal cord and power cord into the terminals on the rear of the piano.

Confirm

After assembling, check these points.

- Are any parts left over?
→ Check the assembly procedure again.
- Does the piano rattle when it is rocked?
→ Make sure all the screws are securely tightened.
- Is the power cord firmly inserted?
→ Check again.
- Is the plug of the pedal cord inserted as far into the connector terminal as it will go?
→ If it is not completely inserted, the sustain and other pedal functions may not work.

- When the piano has been moved or transported, re-tighten the screws securely.

■ About the backup memory

The selected sound and various functions, MIDI settings and **SEQUENCER** contents remain in the memory for about one week after the **POWER** is turned off.

- The backup memory will not function until the **POWER** has been on for about 10 minutes.
- If you wish to return all memories and settings to their initialized status, while pressing the **MODE SET** button, press the **INITIAL** key on the keyboard. Or you can turn on the **POWER** while pressing the **INITIAL** key.
- When the **POWER** is turned on, the MIDI LOCAL CONTROL is set to on.
- If you wish to retain the memory for longer than one week, before one week has elapsed, turn on the power and leave it on for about 10 minutes before turning it off again. The settings will remain in the memory for about one week from this time.

SOUND

Press one of the **SOUND** buttons to select the desired sound.

Each sound features Touch Response, which increases the volume when the keyboard is played harder.

- The sounds can be mixed when two **SOUND** buttons are pressed simultaneously.
- On this piano, the maximum number of notes which can sound simultaneously is 64.

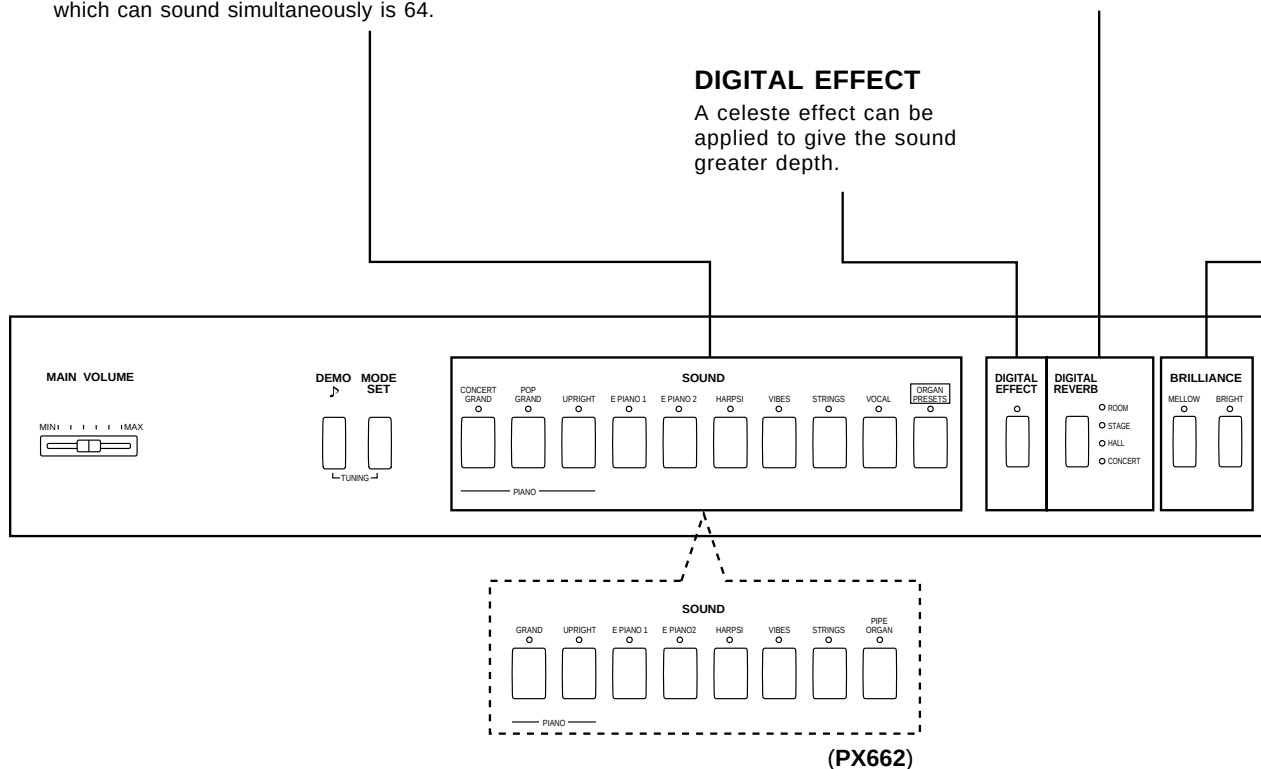
DIGITAL REVERB

DIGITAL REVERB applies a reverberation effect to the sound. Select from four echo types \ROOM, STAGE, HALL and CONCERT.

- The type and depth of the DIGITAL REVERB can be set for each sound.

DIGITAL EFFECT

A celeste effect can be applied to give the sound greater depth.



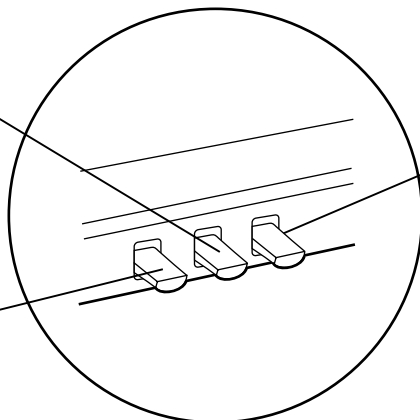
Sostenuto pedal

The middle pedal is used as a sostenuto pedal. If the pedal is pressed while the keys are pressed, a sustain effect is applied to those notes only.

- For sustained-type sounds the notes sound for as long as the pedal is depressed.

Soft pedal

The left pedal can be used as a soft pedal. When the pedal is depressed, the sound is softer.



BRILLIANCE

The **BRILLIANCE** allows you to select the brightness of the sound from 5 settings. If either of the buttons is pressed once, the current setting value will appear on the display, and it can then be changed.

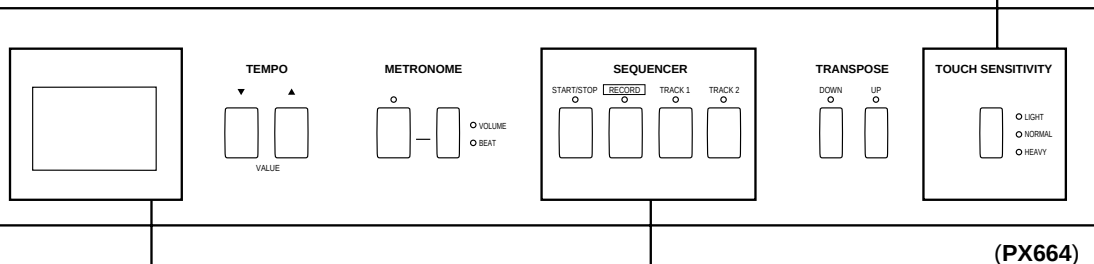
Pressing the **BRIGHT** button increases the brightness; when the **MELLOW** button is pressed, the sound becomes mellower. During setting the brightness is shown on the display (-2 to 2).

- Press both buttons at the same time to return the brightness to 0.
- A short time after the setting is completed, the display will return to the turned-off condition.
- If the **BRILLIANCE** has been set to a number other than 0, one of the indicators remains lit.

TOUCH SENSITIVITY

The keyboard touch (Touch Response) can be changed to match your type of playing.

- Choose from **LIGHT**, **NORMAL** and **HEAVY**.



Display

The display shows a variety of different setting values, and also the **SEQUENCER** and **METRONOME** tempos.

- During normal playing, it is turned off.

SEQUENCER

Record your performance and have it automatically played back.

Sustain pedal

The right pedal allows you to use sustain. When a key is released while this pedal is depressed, the sound is sustained so that it lingers and slowly fades out.

- String resonance is added to some sounds.

Setting the effects for each sound

The **DIGITAL EFFECT**, **BRILLIANCE** and **DIGITAL REVERB** are stored independently for each sound. When a **SOUND** button is pressed, the effect settings for the selected sound are recalled.